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Help?

If this instruction manual does not give an answer or if 'Tips' does not solve your TV problem, you can call your Local Philips Customer or Service Centre. See the supplied World-wide guarantee booklet. Please, have the Model and Product number which you can find at the back of your television set or on the packaging, ready, before calling the Philips helpline.

Model: 37PF9730/10

Product No: .....

Care of the screen

See p. 37.

End of life directives

Philips is paying a lot of attention to producing environmentally-friendly in green focal areas. Your new TV contains materials which can be recycled and reused. At the end of its life specialised companies can dismantle the discarded TV to concentrate the reusable materials and to minimise the amount of materials to be disposed of. Please ensure you dispose of your old TV according to local regulations.

English

easy LINK

EasyLink features are based on the "one touch operation" approach. This means that a sequence of actions are executed at the same time in both the television and the recorder, provided both are fitted with the EasyLink function and connected with the eurocable supplied with your recorder.

nxt®

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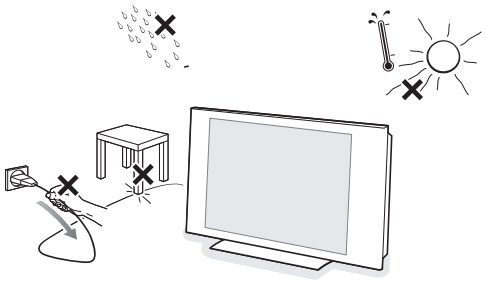
Safety warnings



Do not insert the power plug in a wall socket or hang the TV to the wall before all connections are made.

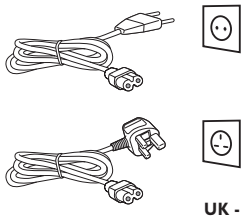
❶ **Wall mounting instructions/Table stand/Swivel**
How to mount the supplied stand and/or wall mount bracket and the swivel, see the supplied separate Quick Start Guide.

Caution: Installing the TV requires special skills that should only be performed by qualified personnel. You should not attempt to do the work yourself. Philips bears no responsibility for improper mounting or mounting that results in accident or injury.

Using the supplied bracket to mount the TV:
- You can ask a qualified service personnel about using the bracket to mount the display on the wall.
- Follow the instructions that come with the bracket before beginning work.
- Make sure that the wall mount is being fixed securely enough so that it meets safety standards.
  The weight of the TV (excl. packaging) is about 27 kg.

❷ Place or hang the TV wherever you want, but make sure that air can circulate freely through the ventilation slots. Do not install the TV in a confined space such as a book case or a similar unit. To prevent any unsafe situations, no naked flame sources, such as lighted candles, should be placed in the vicinity. Avoid heat, direct sunlight and exposure to rain or water. The equipment shall not be exposed to dripping or splashing.

Make your connections



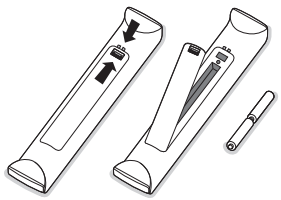
UK - EIRE

❶ Insert the aerial plug firmly into the aerial socket at the bottom of the TV. For best picture quality use the suppressor-aerial cable supplied.

❷ Before installing your TV, connect all your peripheral equipment.

❸ Insert the mains cord supplied into the mains at the bottom of the TV and in the wall socket having a mains voltage of 198-264V.
To prevent damaging the power (AC) cord which could cause a fire or electric shock, do not place the TV on the cord.

Remote control



Insert the 2 batteries supplied (Type R6-1,5V).
Be sure the (+) and (-) ends of the batteries line up correctly (inside of case is marked.)

Switch the TV on

Press the power switch ⏻ at the top of the TV.
An indicator on the front of the TV lights up and the screen comes on. If the TV is in standby mode, press the **-P+** keys or the ⏻ key on the remote control.

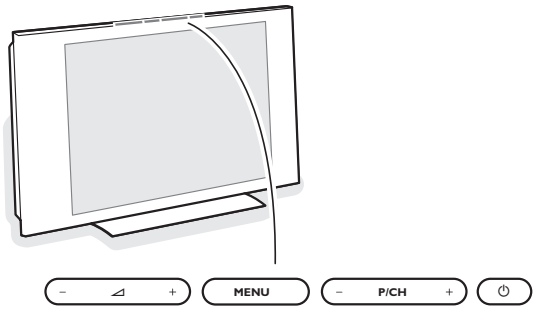
First time installation

The first time *(and only the first time) you switch on your set, you see an installation introduction screen.*
The ***installation procedure*** *consists of a series of screens that guide you through the process.*

1. *After an introduction screen, you are asked to select a language of the TV's on-screen-menus. (The text of the header and the info on screen continuously change language.)*
2. *Press the cursor up/down to highlight your language.*
3. *Press the* ***OK*** *key.*
4. *Follow the instructions on screen to proceed.*

Note: Once you completed the initial installation procedure, you may access the screens from the Settings menu. See p. 8.

Keys at the top of the TV



Should your remote be lost or broken you can still change some of the basic settings with the keys on the top of your TV.
Press the power switch ⏻ to switch the TV on.

Press:
• the ◿ - or + keys to adjust the volume;
• the **P/CH** - or + keys to select the TV channels or sources.

The **MENU** key can be used to summon the Settings menu without the remote control.

Use:
• the ◿ - and + keys and the **P/CH** ▼ and **P/CH** ▲ keys to select menu items;
• the **MENU** key to confirm your selection.

Note:
When activated via the ***MENU*** *key on top of the TV, only* ***Exit*** *lets you dismiss the menu.*
Navigate to ***Exit****, press the cursor right and then press the* ***MENU*** *key.*

Use of the remote control RC4310

Note: For most keys pressing a key once will activate the function. Pressing a second time will de-activate it.
*When a key enables multiple options, a small list will be shown. Press repeatedly to select the next item in the list. The list will be removed automatically after 6 seconds or press **OK** to remove immediately.*

DVD/R SAT TV VCR AUX
Press the **SELECT** key repeatedly to select one of the system modes in which the remote control can be used. If no action is being undertaken within 60 seconds, the remote control returns to TV mode.
After an action in the selected system mode the remote control will remain in this mode for 60 seconds and will then return to TV mode.

Select connected equipment
Press and hold this key until the source indication appears, then press repeatedly to select **EXT1**, **EXT2**, **EXT3**, **EXT4**, **DVI**, **HDMI**, **Side** or **TV**, according to where you connected your peripheral equipment.

BROWSE On/Off
Press to display the Browse menu On or Off. See p. 6.

OK
- to activate a setting
- to display the channel list
- starts playing content in the Multimedia Browser application, p. 20.

(MOT) SWIVEL no function

MENU **Settings menu** on/off
See p. 8.

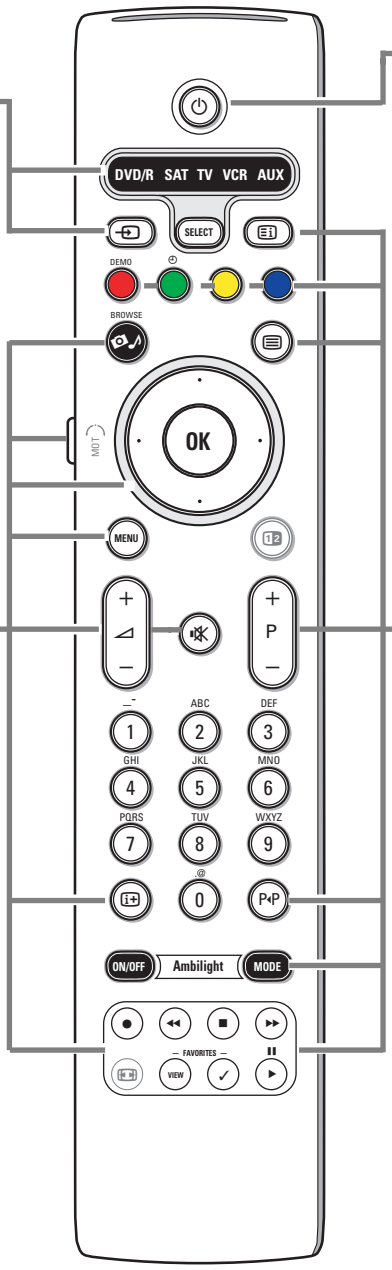
Volume
Press + or - to adjust the volume.

Interrupt the sound or restore it.

Alphanumeric keys
To select a TV channel. See p. 6.

Display information
Press to display (when available) information about the selected TV channel and programme.

●◀◀■▶▶❚❚▶
- Audio and Video equipment keys. See p. 31.
- Multimedia browser functional keys. See p. 20.



Standby
Press to switch the TV on or off from or to standby mode.
When switched to standby, a red indicator on the TV lights up.
Note: the TV is never powered off completely unless it is physically unplugged.

DEMO **Demo on/off** See p. 7

Colour keys
When functions are attached to the colour keys, the colour keys show on screen.

Teletext index page See p. 21.

Teletext On/Off See p. 21.

Cursor keys
Press the cursor keys up/down, left/right to navigate through the menus.

+P- Channel selection
To browse through the TV channels and sources stored in the preferred channels list.

P↩P Previous programme
Press to alternate between the currently viewed and the previously viewed TV channel.

AMBILIGHT
- **ON/OFF**
Press to switch Ambilight On or Off. For the Ambilight settings, see TV menus, Ambilight, p. 18.
- **MODE**
Press this key repeatedly to toggle through the Ambilight modes.

● **Instant record**
See Record with your recorder with EasyLink, p. 30.

FAVORITES
- **VIEW** To display a list of all channels marked as favourite.
- 3 To add or remove a channel in the favourite list of TV channels.

Dual screen/PIP

Press the key to switch on or off Dual screen or PIP, according to the format selection made in the **PIP format** list in the Setup, Preferences/Picture/sound preferences menu, p. 11.
PIP allows you to call up a subscreen within the main screen enabling you to watch two TV channels or a TV channel and pictures from a peripheral at the same time.
Dual screen allows you to divide the main screen into two subscreens enabling two TV channels or a TV channel and an external source or a combination of one of them with Teletext (see p. 21) to be watched simultaneously.

Note: Not all combinations might be possible. In such a case a message appears on the screen.

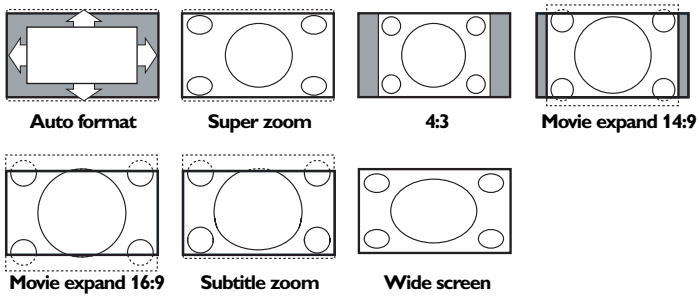
1. Press the cursor left/right to highlight the PIP window or the left/right screen in Dual screen
2. Press the **-P+** key or the key or the digit keys in order to change TV channels, external sources or teletext pages in the highlighted screen.
   Note: on screen information, which appears when changing channels, always refers to the highlighted screen.
3. Press the key again to return to a full main screen picture. The TV tunes to the picture which was highlighted in the Dual screen or PIP mode.
   Notes:
   - *Audio only plays from the main, when PIP has been selected, or from the left screen, when Dual screen has been selected.*
   - *When in Dual screen, two display formats are supported: full screen or squeezed.*
     Multimedia browser content will always be displayed full screen.
   - *When PIP or Dual screen mode is activated, and a TV channel or source is locked, the picture is grayed out.*

Define the position of the PIP screen

1. Press the cursor right to highlight the PIP screen.
2. Press the red colour key on the remote control to select **Position**.
   Note: If no action has been undertaken, the function bar at the bottom of the screen will disappear after a few seconds. Press any colour key to make it re-appear.
3. Use the cursor keys to define the position of the PIP screen.

Picture format

Press this key repeatedly to select another picture format: Auto format, Super zoom, 4:3, Movie Expand 14:9, Movie Expand 16:9, Subtitle zoom or Wide screen.



Auto format makes the picture fill the screen as much as possible.
In case of subtitles in the bottom black bar, Auto format makes the subtitles visible. In case of a broadcaster logo in the corner of the top black bar, the logo disappears from the screen.

Super zoom removes the black bars on the sides of 4:3 programmes with minimal distortion.

When in Movie Expand 14:9, Movie Expand 16:9, Super zoom or Subtitle zoom picture format, you can make subtitles visible with the cursor up/down.
Note: With HD sources not all screen formats will be available.

Alphanumeric keys on the remote control

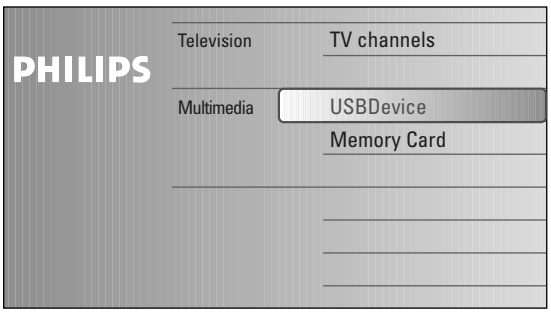
The alphanumeric keys on the remote control can be used to enter digits and text.
Multi-tap entry can be used to enter alphanumeric information when necessary. The characters displayed are dependent on the language selected in the Installation menu. See p. 8.
Text is entered similar to the method used for entering text messages on a cellular phone.
When a letter or number has been entered, the cursor automatically advances to the next character position after the specified time out or by pressing the cursor right.

RC key	Default Multi-tap Alphanumeric entry order
1	<space> ␣ - 1 <space> ␣ - 1 (etc.)
2	a b c A B C 2 a b c (etc.)
3	d e f D E F 3 d e f (etc.)
4	g h i G H I 4 g h i (etc.)
5	j k l J K L 5 j k l (etc.)
6	m n o M N O 6 m n o (etc.)
7	p q r s P Q R S 7 p q r s (etc.)
8	t u v T U V 8 t u v (etc.)
9	w x y z W X Y Z 9 w x y z (etc.)
0	. @ 0 . @ 0 (etc.)

Also the cursor up/down can be used to enter alphanumeric information.
When finished, press the **OK** key to confirm the entry.
Move to the left panel.

Key	Default RC_CURSOR_UP/RC_CURSOR_DOWN Alphanumeric Entry Order
RC_CURSOR_UP	a b c d ...A B C D ... 1 2 3 ... 0 <space> _ - . @
RC_CURSOR_DOWN	@ . - _ <space> 0 9 8 7 ... Z Y X ... z y x ... c b a

Browse screen



The Browse screen (and the underlying Multimedia content browser) is intended to contain all content, services, applications you are interested to consume.

1. Press the key to activate.
2. Press the cursor up/down to move the highlight up and down in the list of menu items.
3. Press the cursor right to go deeper into the structure.

- **Television:**

  TV channels leading to the list of TV channels.

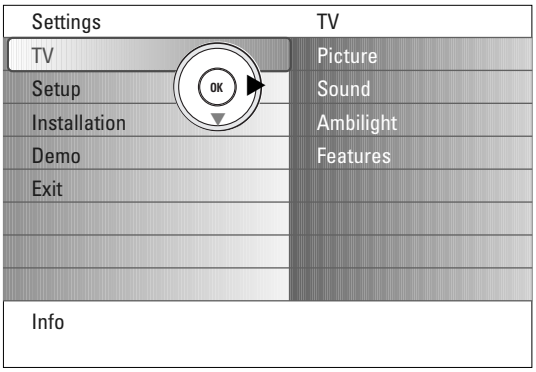
- **Multimedia:**

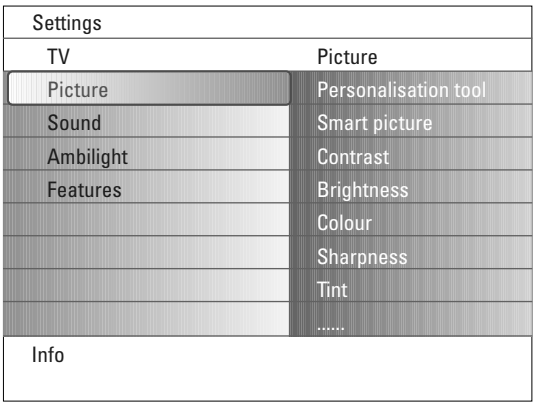
  Contains the locally connected devices on which content (pictures and audio files) is stored. See Multimedia browser, p. 20.

To use the menus

Introduction

A lot of guiding instructions, help texts and messages will be displayed on your TV when using the menus or when trying to execute an action.
Please, follow the instructions and read the help text which are being displayed on the specific item highlighted.
The colour keys refer to different actions which may be executed depending on the activated peripheral equipment. Press the corresponding colour key on the remote control to perform the required action.



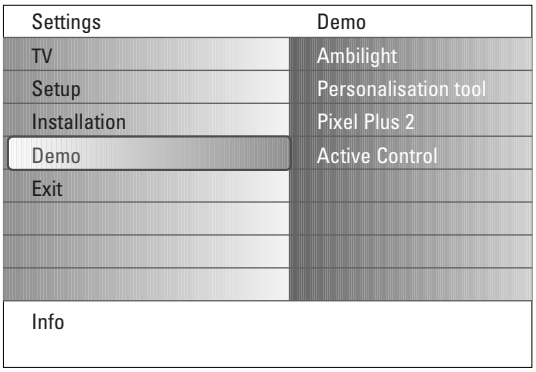


How to navigate through the Settings menus

The Settings menu allows you to access and change settings and preferences.

- Press the **MENU** key on the remote control to summon the Settings menu.
  - On the left panel the highlight can be set on a menu item with the cursor up/down.
    The right panel shows the content of the highlighted menu item in the left panel.
    Note: Sometimes not all the menu items are visible on the screen. Use the cursor down to reveal all items.
  - Use the cursor right to enter the right panel.
    The content of the right panel is moved to the left panel and the right panel shows the content of the newly highlighted item in the left panel.
    Note: In some cases it is important that the picture can be watched while adjusting the settings. This means that when the highlight is on the right side panel, the other menu items hide away. When cursor left is pressed again, the hidden menu items re-appear and the highlight moves to the left panel.
- Press the cursor left to go one menu level up again.
  - Press the **OK** key on the highlighted item to activate and to dismiss the menu.
  - Press the **MENU** key again to exit the Settings menu.
    Note: The menu is also dismissed by pressing one of the colour keys (if present) referring to certain actions which may be executed.

Demo

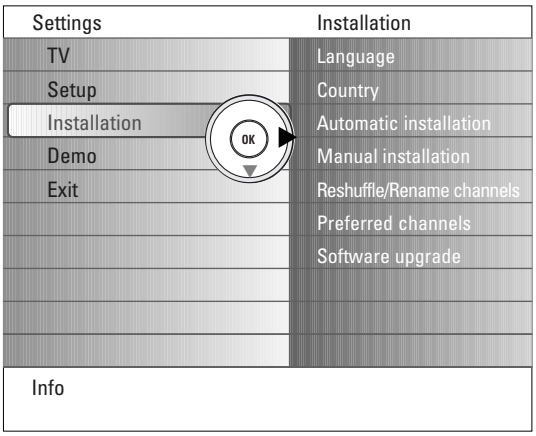


The **Demo** menu allows the user to get an idea of the features that are part of the television.

1. Select **Demo** in the Settings menu and press the cursor right.
2. Highlight a desired demo with cursor up/down.
3. Press **OK** to start playing the highlighted demo.
   Note: The selected demo is played once.

Press the red colour key to exit the demo and to return to TV mode.

Note: The demos require no user interaction except for starting the demo.



Select the menu language and country

1. Press the **MENU** key on the remote control.
2. Use the cursor down to select **Installation** in the Settings menu.
3. Use the cursor right to enter the Installation menu.
4. Select **Language** and enter the list of available languages with the cursor right.
5. Select your language with cursor up/down and press the **OK** key to confirm your selection.
6. Select **Country** with the cursor up/down and enter the list with the cursor right.
   Select the country where you are now located and press the **OK** key.
7. Proceed with the Installation menu.

Store TV channels

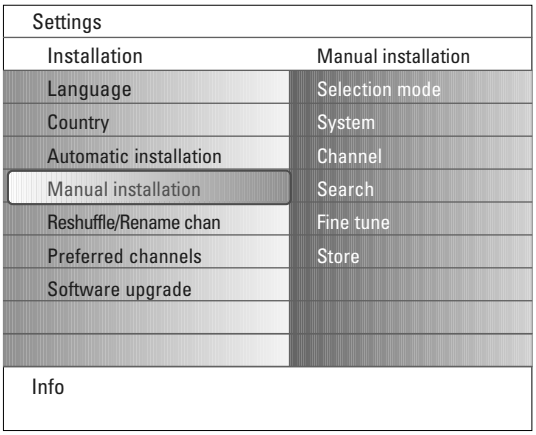
After language and country are set correctly, you can now search for and store the TV channels in two different ways: using Automatic Installation or Manual Installation (tuning-in channel by channel, see further).

Automatic installation

1. Select **Automatic installation** in the Installation menu.
   Note: All channels must be unlocked in order to autoprogram. If requested, enter your code to unlock all channels. (See TV, Features menu, Childlock, p. 17.)
2. Press the cursor right to enter the Automatic installation.
   The autoprogramming option label **Start now** appears.
3. Press the **OK** key.
4. Press the green key **Start** to start autoprogramming.
   The menu screen disappears and the progress of autoprogramming is displayed.

   If a cable system or a TV channel which broadcasts ACI (Automatic Channel Installation) is detected, a programme list appears. Without ACI broadcast, the channels are numbered according your language and country selection. You can use Reshuffle to renumber them. See p. 9.

*It is possible that the cable company or the TV channel displays a broadcast selection menu. Layout and items are defined by the cable company or the TV channel. Make your choice with the cursor and press the **OK** key.*



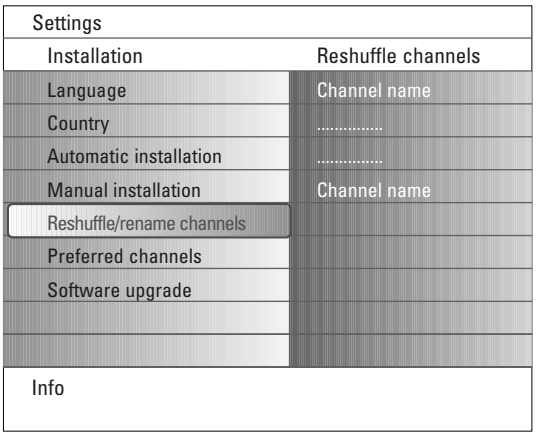
Manual installation

1. Select **Manual installation** in the Installation menu.
2. Use the cursor right to enter the Manual installation menu.
3. Select **Selection mode**.
   Select either the frequency band, the C-channel option for aerial channels or the S-channel option for cable channels.
4. Press the cursor down to select **System**.
   Select your country or part of the world where you are now located.
5. Press the cursor down to select **Channel.**
   Enter or select the number where you would like to store the TV channel.
6. Press the cursor down to select **Search**.
   The frequency or the C- or S-channel number increases until the TV channel is found.

   Note: If you know the frequency, the C- or S-channel number, enter the 3 or 2 digits of the frequency or the channel number directly with the digit keys 0 to 9 (e.g. 048).
7. Press the cursor down to select **Fine tune**.
   Adjust the frequency with the cursor up/down in case of poor reception of the channel found.
8. Press the cursor down to select **Store.**
   Press the cursor right and store the channel found with the **OK** key.

   Repeat steps 5 to 8 to search for another TV channel.

Searching for and storing TV channels is done channel by channel.
*You must go **through every step** of the Manual Installation menu.*



Reshuffle/Rename channels

You can change the order of the stored TV channels.
It is also possible to change the name stored in the memory or to assign a name to a TV channel or external for which a name has not yet been entered. A name with up to 5 letters or numbers can be given to the programme number 0 to 99 and to the externals.

1. Select **Reshuffle/Rename channels** in the Installation menu.
2. Press the cursor right. A channel list appears.
3. Select the TV channel you want to reshuffle or to rename with the cursor up/down.

Reshuffle

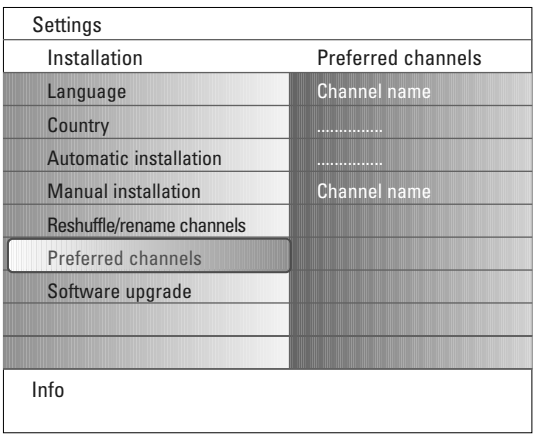
1. Press the green colour key on your remote control. The highlight is on the selected TV channel you want to exchange.
2. Select the new number you want to exchange the channel with the cursor up/down.
3. Press the green colour key on your remote control to swap the reshuffled channel with the currently highlighted channel.

   Note: Press the red colour key to cancel the reshuffling action.
4. Repeat to reshuffle other TV channels.

Rename

1. Press the red colour key on your remote control. The highlight is on the selected TV channel you want to rename.
2. Select the characters with the cursor up/down or with the alphanumeric keys on the remote control.
3. Select the following position with the cursor right.
4. Enter a new character.
5. Press the green colour key or the **OK** key when finished.

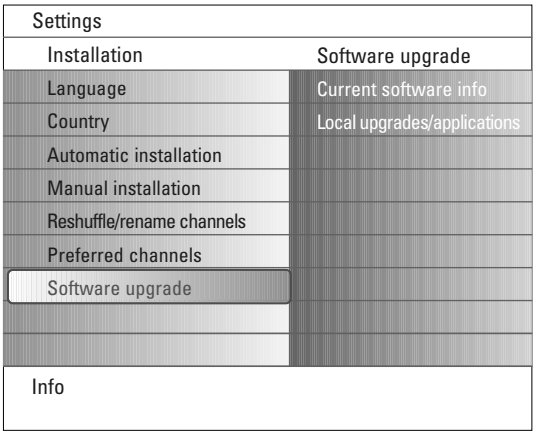
   Notes:
   - *Press the yellow colour key to delete all characters. The cursor will be positioned at the beginning.*
   - *Press the blue colour key to delete the character the cursor is positioned. Enter a new character with the cursor up/down.*
   - *Space, numbers and other special characters are located between Z and A.*
6. Select another channel number and repeat steps 2 to 5 to do another renaming.



Preferred channels

After leaving the Installation, you can browse through the TV channels with the **-P+** key. Only those channels which are in the preferred list, will be displayed. In this menu you can select which channels will be part of the preferred list.

1. Select **Preferred channels** in the Installation menu.
2. Press the cursor right to display the list of stored TV channels.
3. Press the cursor up/down to select a TV channel you want to skip from the preferred list.
4. Press the **OK** key to confirm.
5. Repeat for every channel you want to make non-preferred.



Software upgrade

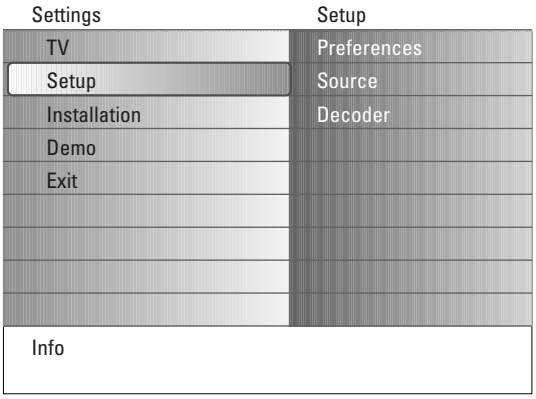
This menu allows you to upgrade your TV software using a USB device or Memory Card device.

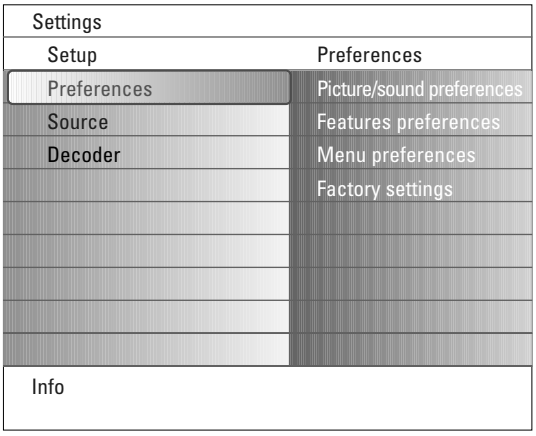
USB device/Memory Card upgrade

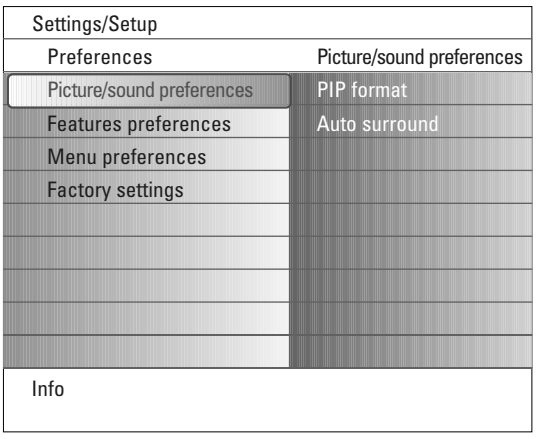
It is possible to initiate an upgrade procedure from a USB device or Memory card device before starting up the TV. The memory device must be filled with the appropriate upgrade image (and structure) which can be found on the www.philips.com/support website.
How to upload a new software version on your memory device, see Annex 1, p. 38.

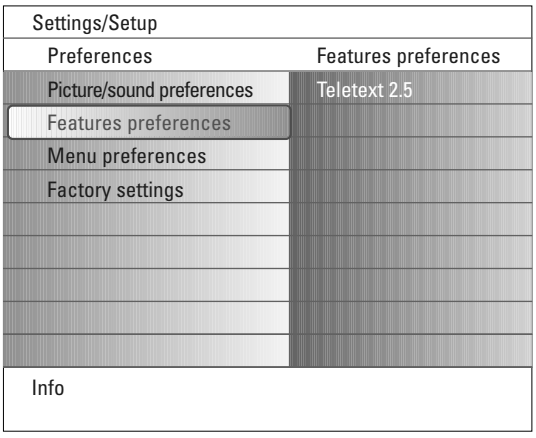
It is also possible to select and execute additional applications stored on your USB device or Memory card. E.g. games or any application that cannot be integrated in the TV software.

Setup menu









This menu is used to control the settings of special TV functions, features and peripheral equipment.

The **Preferences** menu allows you to change settings that will typically be accessed only occasionally.

The **Source** menu allows you to select a source.

The **Decoder** menu allows you to define one or more programme numbers as decoder programme numbers.

Preferences

1. Press the **MENU** key.
2. Select **Setup** with the cursor down and press the cursor right to select the **Preferences** menu.
3. Press the cursor right again to select **Picture/sound preferences**.
4. Press the cursor right once more to enter the Picture/sound preferences menu.

Picture/sound preferences

PIP format
This menu allows you to select the preferred format (PIP or Dual screen) which can then be displayed toggling the 1 2 key on the remote control **On** or **Off**.

1. Select **PIP format**.
2. Press the cursor right.
3. Select **PIP** or **Dual screen** with the cursor up/down.
See Use of the remote control, p. 5.

Auto surround

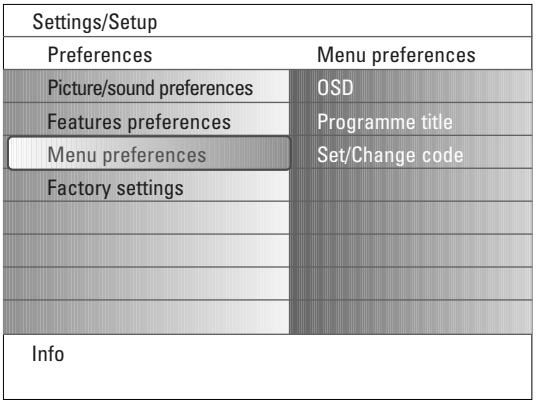
Sometimes the broadcaster transmits special signals for Surround sound encoded programmes. The TV automatically switches to the best surround sound mode when **Auto surround** is switched **On**.

Features preferences

Teletext 2.5
Some broadcasters offer the opportunity to see more colours, other background colours and nicer pictures in the teletext pages.

1. Select **Teletext 2.5** in the Features preferences menu.
2. Press the cursor right to select **Teletext 2.5 On** or **Off**.
3. Select **Teletext 2.5 On** to take advantage of this feature.
Select **Teletext 2.5 Off** if you like the more neutral teletext layout.
The selection made is valid for all channels which broadcast Teletext 2.5.

Note: It may take a few seconds before teletext broadcast switches over to Teletext 2.5.



Menu preferences

OSD

1. Select **OSD**.
2. Press the cursor right to select **Normal** or **Minimum**.
   Normal to activate the continuous display of the channel number (for 10 minutes) and extended display of TV channel and programme information on screen. E.g. information on the main or auxiliary programme, input signal quality of connected peripheral equipment, the display format and sound mode.
   Minimum to activate the display of reduced channel information.
   See Use of the remote control, p. 4, i+ Display information.

Programme title

1. Select **Programme title**.
2. Press the cursor right to select **Programme title Yes** or **No**.
   When selected **Yes**, after the selection of a TV programme or after pressing the i+ key on the remote control, a TV channel may transmit the name of the TV channel or the programme title.
   When selected **No**, the programme title will only appear after pressing the i+ key and not after the selection of a TV channel.

Set/Change code

1. Select **Set** or **Change code** with the cursor down.
2. If no PIN-code exists yet, the menu item is set to **Set code**. Follow the instructions on screen.
   If a PIN-code has previously been entered, the menu item is set to **Change code**. Follow the instructions on screen.
   All number combinations from 0000 tot 9999 are valid numbers.
3. The **Menu preferences menu** reappears with a message confirming that the PIN has been created.

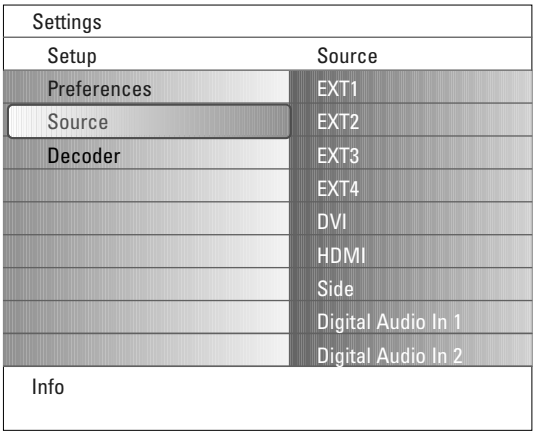
Important: You have forgotten your code !

1. Select **Change code** in the Menu preferences menu and press **OK**.
2. Press the cursor right and enter the overriding code 8-8-8-8.
3. Press the cursor again and enter a new personal 4-digit code. The previous code is erased and the new code is stored.

Factory settings

This function allows you to reset most of the picture and sound settings to their predefined factory states.

1. Select **Factory settings** with the cursor down.
2. Press the cursor right.
3. Press the **OK** key to erase settings and reset them to their default values.



Source

This menu allows you to select the peripheral equipment you have connected to the external inputs/outputs.

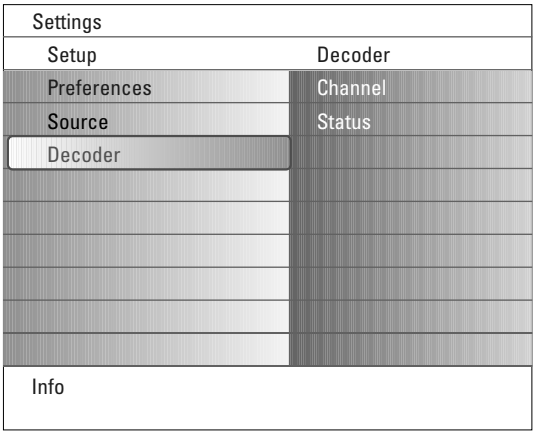
1. Select **Source** in the Setup menu.
2. Press the cursor right.
3. Select the input to which the peripheral equipment is connected.
4. Press the cursor right again to enter the list of types of peripherals connected to the selected input.
5. Select the peripheral equipment with the cursor up/down.

   When you select **EXT1**, **EXT2**, **EXT3**, **EXT4**, **DVI**, **HDMI** or **Side**, a list appears allowing you to identify which type of peripheral equipment is attached to this input. The TV detects the presence of the connected peripheral equipment and the signal is routed appropriately.

Digital Audio

Select **Digital Audio In 1** or **2** when the TV expects digital audio for a connected peripheral equipment to come from a Digital audio input. Make your selection of the source to which the peripheral equipment with digital audio input has been connected.

In addition to accepting audio input via Digital Audio In, the TV can output encoded Dolby Digital audio via the **DIGITAL AUDIO OUT** connector to an external amplifier or receiver. If your amplifier or receiver has a matching connector for Digital Audio In, you can connect it with a single cable to the TV's **DIGITAL AUDIO OUT**.
See Connect Peripheral Equipment, Digital MultiChannel Surround Receiver, p. 27.



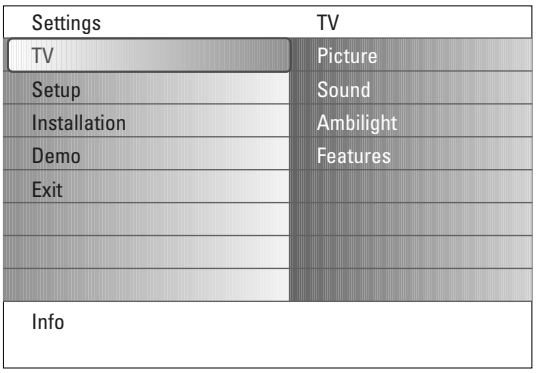
Decoder

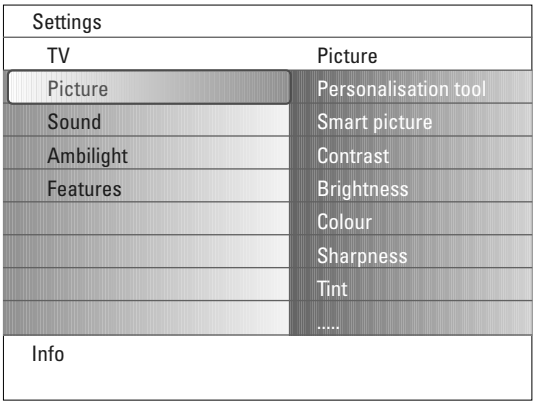
If a decoder or a descrambler is connected, see p. 24, you can define one or more channel numbers as decoder channel numbers.

1. Select **Decoder** in the Setup menu.
2. Press the cursor right to select **Channel**.
3. Select the channel number under which you have stored the programme coming from your decoder.
4. Select **Status**.
   - Select the input used to connect your decoder: **None**, **EXT1** or **EXT2**.
   - Select **None** if you do not want the selected channel number being activated as a decoder channel number.

*Note: Select **EXT2** when the decoder is connected to your EasyLink recorder.*

TV menu





Press the **MENU** key on the remote control to summon the Settings menu. The TV menu gives you an overview of the menus you can select.

Note: Depending on the input signal, one or more menu items may not be selectable.

Picture menu

Note: Some menu items are not available in case of HD sources.

1. Press the cursor right to select **Picture**.
2. Press the cursor right again to enter the Picture menu.
3. Select the menu items with cursor up/down.
4. Press the cursor right again.
5. Adjust the settings with the cursor left/right. Select a submenu item with the cursor up/down.

Personalisation tool

The **Personalisation tool** helps you to come to a personal picture setting. This is done by presenting a series of several adjustment screens each having split screens. Each time you have to select the most preferred side of the screen. Finally a full screen appears with all the settings selected.

Note: The Personalisation tool will not alter the presence of behaviour of other picture setting options, except that it overwrites the Personal settings of Smart picture.

1. Select **Personalisation tool** and press the cursor right.
2. A welcome screen appears followed by several adjustment screens.
3. With the colour keys, each time select your preferred setting on the left or right screen side.
4. Finally press the green colour key to store your selected settings.

Smart picture

Select **Smart picture** to display a list of predefined picture settings, each corresponding with specific factory settings.
Personal refers to the personal preference settings of picture in the picture menu.
*Note: This Philips TV has been set at the factory to look best in bright shop environments which typically use fluorescent lighting. As your home will likely not be as well lit as a shop, we recommend that you cycle through the various smart picture modes to find the one that best suits your own viewing conditions. Most consumers will find that **Natural** is the correct choice.*

Contrast

This will adjust the intensity of bright parts in the picture but keep the dark parts unchanged.

Brightness

This will adjust the light output of the complete picture, which will mainly affect the darker areas of the picture.

Colour

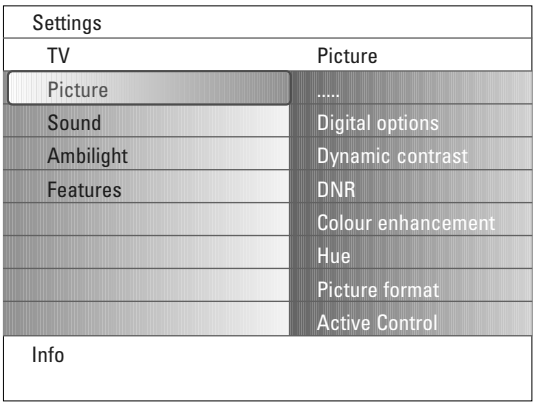
This will adjust the saturation level of the colours to suit your personal preference.

Sharpness

This will adjust the sharpness of fine details in the picture.

Tint

This will increase or decrease **Warm** (red) and **Cool** (blue) colours to suit personal preferences.
Select **Cool** to give the white colours a blue, **Normal** to give the white colours a neutral, **Warm** to give the white colours a red tint.



Digital options

Pixel Plus 2 is the most ideal setting, as it fully processes the image to make every single pixel the best it can be, improving contrast, sharpness, picture depth, and colour reproduction and brilliance from every source, including High Definition.
For the most optimum motion reproduction of all source materials, select the **Movie Plus** setting.
Standard mode is recommended only for very noisy or poorly mastered sources or for those who find the smoothness of Pixel Plus 2 unsettling.

Dynamic contrast

Automatically makes the contrast in the darker and the brighter picture areas more noticeable as the image on the screen changes.
Normally select **Medium**. It may be preferred to select **Minimum**, **Maximum** or **Off**.

1. Press the cursor right to enter the list.
2. Select one of the settings with cursor up/down.
3. Press the cursor left to return to the picture menu.

DNR (Digital Noise Reduction)

Automatically filters out and reduces the image noise and improves picture quality when receiving weak video signals.

1. Press the cursor right to enter the list.
2. Select **Off**, **Minimum**, **Medium** or **Maximum** according to the image noise.
3. Press the cursor left to return to the picture menu.

Colour enhancement

When activated, this feature automatically controls green enhancement and blue stretch. It makes the colours more vivid.

1. Press the cursor right.
2. Select **On** or **Off** in order to activate/de-activate Colour enhancement with the cursor right.

Hue

This compensates for the colour variations in NTSC encoded transmissions.

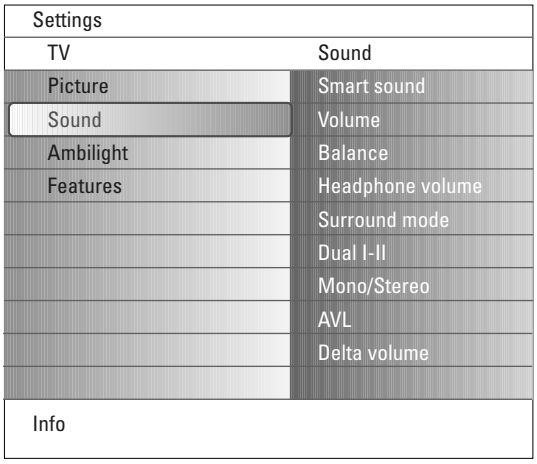
Picture format

This menu item performs the same as the ⊡ key on the remote control.
See Use of the remote control, p. 5.

Active Control

The TV continuously measures and corrects all incoming signals in order to provide the best picture possible.
It also uses a sensor which monitors the ambient light conditions in the room and adjusts key picture settings for best viewing.
When Active Control is set to Maximum, the brightness, the contrast and the colour of the Ambilight shall be influenced by the light sensor.
When Active Control is set to Medium, only the colour of the Ambilight shall be influenced.

1. Select **Active Control**.
2. Press the cursor right to enter the list of Active Control values.
3. Press the cursor up/down to select the Active Control values **Off**, **Minimum**, **Medium** or **Maximum**.
   The picture settings are being optimised continuously. Those menu items can not be selected.
4. Press the **OK** key or wait for the time out to dismiss the Active Control display.



Sound menu

1. Select **Sound** in the TV Settings menu.
2. Press the cursor right to enter the sound menu.
3. Select the menu items with cursor up/down.
4. Press the cursor right.
5. Adjust the settings with cursor keys.
   Remember, control settings are at normal mid-range levels when the bar scale is entered.

Smart sound

Select **Smart sound** to display a list of predefined sound settings, each corresponding with specific factory settings of Treble and Bass.
Press the cursor right to enter the list.
Press the cursor up/down to select a predefined sound setting.
Personal refers to the personal preference settings of sound in the sound menu.

Note: The moment you are in a predefined Smart sound setting and you modify a setting in the Sound menu, all values of the menu will overwrite the previously made personal setting.

Volume

This will adjust the sound output level.

Balance

This will adjust the output of the right and left speakers to obtain the best stereo reproduction for your listening position.

Headphone volume

This controls the level of sound through the headphones.

Surround mode

This selects the modes for more spatial or surround sound reproduction dependent on the broadcast signals or signals from external inputs received.

Dual I/II

This will select, per channel, **Language I** or **Language II**, when dual sound transmission is available.

Mono/Stereo

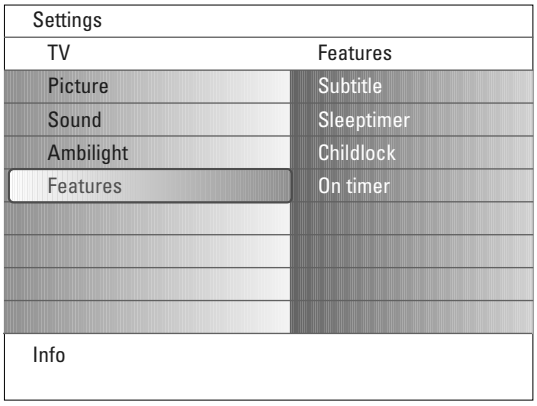
This selects, per TV channel, Mono or Stereo sound when analog stereo broadcasts are available.

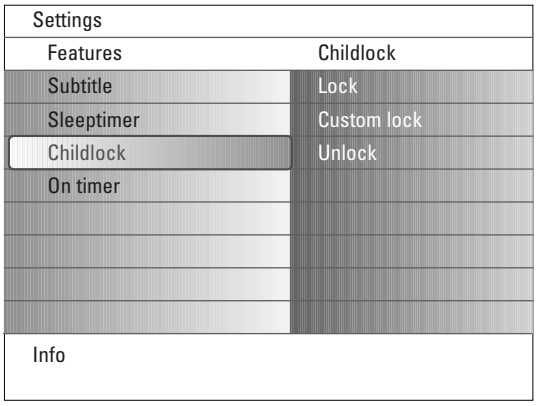
AVL (Automatic Volume Leveler)

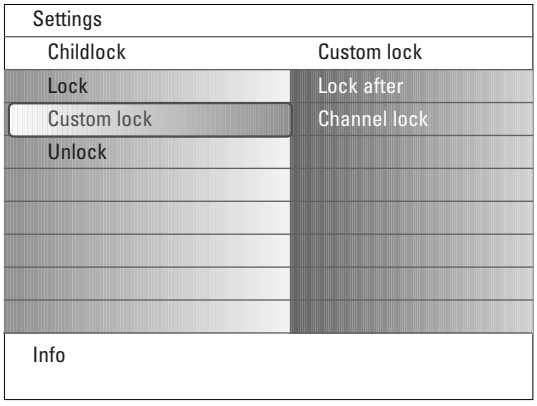
This automatically reduces the volume differences between channels and programmes, providing a more constant overall level. This will also reduce the dynamics of sound.

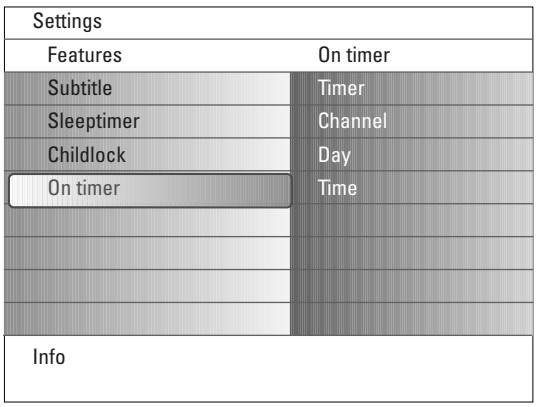
Delta volume

This allows you to correct for any permanent volume differences between TV channels or external sources.









Features menu

1. Select **Features** in the TV Settings menu.
2. Press the cursor right to enter the Features menu.
3. Select the menu items with cursor up/down.
4. Press the cursor right.
5. Adjust the settings with the cursor up/down.

Select subtitles

The subtitle page must be stored for each TV channel.
Switch on teletext and select the proper subtitle page from the index.
Switch off teletext.
Subtitle On will automatically display them on the selected TV channels if subtitles are in the transmission. A symbol will indicate that the mode is on.
Select **On during mute** when you want to have the subtitles automatically displayed only when the sound has been muted with the key on the remote control.

Sleeptimer

This sets a time period after which the TV automatically switches to standby.

1. Select **Sleeptimer**.
2. Press the cursor right.
3. Select a value with the cursor up/down. The list will have values from **0** to **180 minutes**.
   You can always switch off your TV earlier or select another time set.

Child lock

1. Select **Child lock** in the Features menu.
2. Press the cursor right to enter the Child lock menu. You're summoned to enter your code.
   Note: You have to re-enter your code each time you enter the child lock menu.

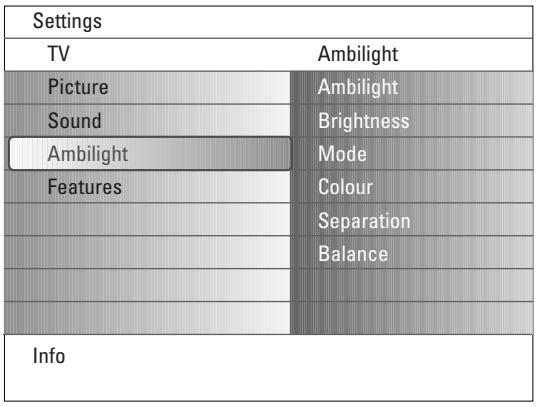
   Important: You have forgotten your code ! See p. 12.
3. Select one of the menu items of the Child lock menu:
   - **Lock** to lock all channels and externals.
   - **Custom lock** and press the cursor right.
     Select:
     - **Lock after** to lock all programmes from a certain time onwards.
       Press the cursor right and enter the time with the cursor up/down and right. Select **On** with the cursor right to set the lock.
     - **Channel lock** to lock a certain TV channel or external.
   - Select **Unlock** to disable all locks you have set.

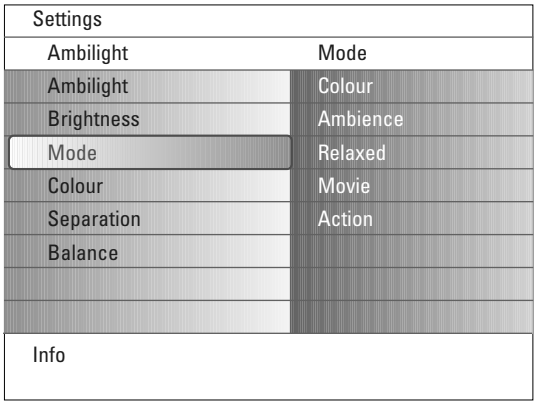
On timer

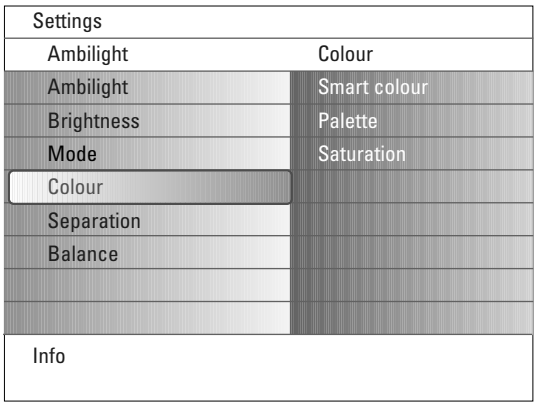
From standby, this automatically switches the TV to the specified programme number, at the specified time.

1. Select **On timer** in the Features menu.
2. Press the cursor right to enter the On timer menu.
3. Select **Timer** and press the cursor right.
4. Select **On**.
5. Select **Channel** and then the TV channel you want your TV to switch to on a selected time and day.
6. Select **Day** and then a day of the week or select **Daily**.
7. Select **Time** and enter the time with the digit keys or with the cursor up/down.
8. Press the **OK** key to activate.
9. Press the **MENU** key to switch off the menu.

Notes:
- To check your timer settings, press the i+ key.
- Only one On timer can be set.







Smart colour modes:

- **Personal**: Select any colour or hue to match to your personal taste, e.g. your interior, the programme content (sports, movie, etc.), the mood you are in, etc.
- **Warm white**: The colour is matched to that of most normal lightbulbs. Select this setting if you want the Ambilight to fit best with normal living room lighting.
- **Cool white**: The colour is matched to that of normal daylight (6500K). Select this setting if you prefer more cool lighting.
  Note: the 6500 K is the SMPTE recommended setting for ambient backlighting of displays.
- **Blue**: The blue colour is preferred by most consumers to create a cool, modern and /or mystical atmosphere. Select this setting according to your personal taste or mood.

Ambilight menu

Ambilight is an innovative lighting concept using light with fully adjustable colours at the back of the TV to enhance the viewing experience. Analysis of the picture content adapts the colours continuously, or the lights can be set to any fixed colour and many shades of white. Ambilight creates the ideal viewing environment for your TV resulting in improved relaxed viewing, improved perceived picture detail, contrast and colour.
In standby mode the lights can be set/operated to any colour and create a unique ambiance in the room.

1. Select **Ambilight** in the TV menu.
2. Press the cursor right to enter the Ambilight menu.
3. Select Ambilight and press the cursor right to select **Off** or **On**.
   - **Off**: will switch off the ambient lights and downlight all other ambilight menu items.
   - **On**: the ambient lights will be on. Refine the light settings in the menus below.
4. Select **Brightness** to adjust the light output of the ambient lights.
5. Select **Mode** and press the cursor right to select **Colour**, **Ambience**, **Relaxed**, **Movie** or **Action**.
   - **Colour**: this will show constant light according to the settings in the Ambilight colour menu. See below.
   - The options **Ambience**, **Relaxed**, **Movie** and **Action** will dynamically match brightness and colour to the screen content.
     The mode selection made will effect the speed and/or saturation and/or intensity which determines the viewing impression.
     E.g. in **Relaxed** mode, the rate of brightness and colour change is smoothly and soft which gives you a more immersive yet relaxed viewing.
     Ambience is the rate of brightness and colour change as predefined in the factory.
     Movie will influence the perception of a movie whereas **Action** mode will influence the dynamic impression.

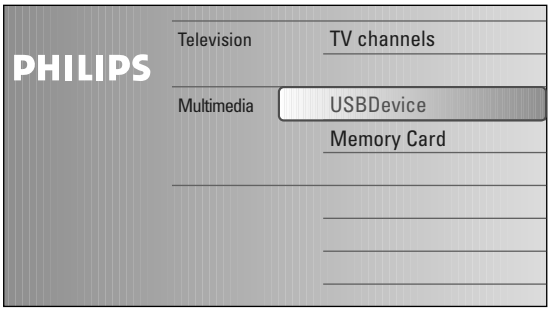
   Notes:
   - The rate of change is limited, as not to cause uncomfortable sensations.
   - According to the selection made, some Ambilight menu items will be downlighted and can not be selected.
6. In case **Colour** has been selected in the Mode menu:
   - Select **Colour** in the Ambilight menu and press the cursor right.
   - Select **Smart colour** and then select **Personal**, **Warm white**, **Cool white** or **Blue**.
   - Select **Palette** to select the general colour of the light output.
   - Select **Saturation** to adjust the colourfulness of the light.

   Notes:
   - Adjusting the Palette and/or Saturation settings will set the colour mode to Personal.
   - The selected colour mode will be the one used when turning on the ambient lights from standby mode.
7. In case **Ambience**, **Relaxed**, **Movie** or **Action** has been selected in the Mode menu:
   - Select **Separation** in the Ambilight menu and press the cursor right.
   - Select **Off** for a mono behaviour which means that all lamps will behave equally.
   - Select **Minimum**, **Medium** or **Maximum** to define the Ambilight stereo effect over the available lamps.
8. Select **Balance** and use the cursor left/right to adjust and generate any colour and level of light intensity on the left and right side of the picture to perfectly match your room setup.

Note: Infrared interference

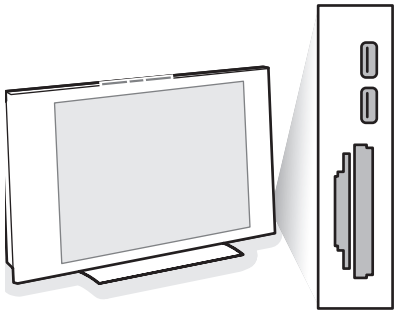
To avoid bad infrared remote control reception, place your peripheral equipments out of sight of the ambient lights of your TV.
Note: Ambilight does not function well when the room temperature is less than 59°F/15°C.

Multimedia Browser



The Multimedia browser lets you display pictures or play audio files stored on a USB device or a memory card.
The Multimedia browser application is invoked from the Browse menu (press the key) by selecting a device and pressing the cursor right.

Notes:
- *Following types of memory cards can be read: Compact Flash I & II, Memory stick, Memory stick PRO, SD Card/Mini SD Card, Smart Media, Micro Drive, MultiMedia Card.*
- *Following file formats can be reproduced:*
  - *For pictures: JPEG*
  - *For audio: MP3, MP3 Pro*
- *Only FAT/DOS-formatted memory devices are supported.*
- *If your digital camera is not supported, try one of the following solutions:*
  - *Make sure your camera is switched on and verify if its configuration settings are correct (see the manual of your camera).*
  - *Remove the memory card from your camera and insert it in the memory card slot. Refer to www.philips.com/support for more information.*
- *Philips cannot be responsible if your USB device or memory card is not supported.*



Viewing content from a Memory card / USB device

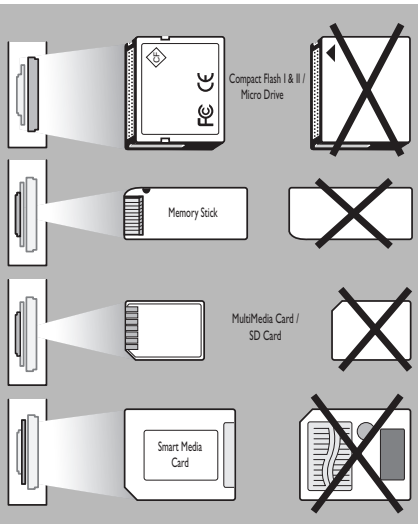
Inserting a memory card / USB device

Note: Memory cards or USB devices are not supplied with this TV.

Insert a memory card in one of the cardslots at the right side of the TV.
Insert it to be clicked in.
In case of a memory stick or a digital camera, connect it to one of the USB2.0 connectors.
When a memory card or a USB device is inserted, the Multimedia menu is displayed automatically, see further.

Removing the memory card / USB device

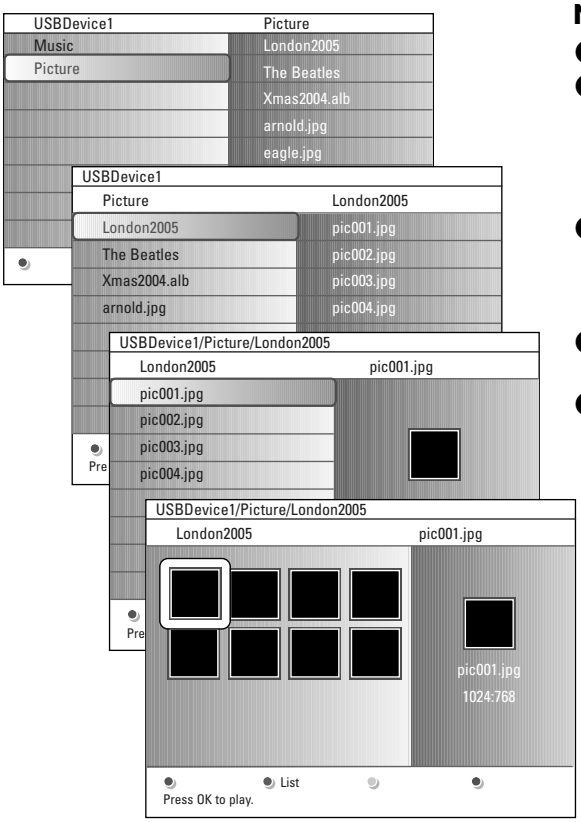
1. First switch off the Browse menu. To do so, navigate to the Multimedia browser menu and press the key on the remote control.
2. Remove the memory card/USB device.



Card data protection

- Do not remove the card/USB device when the content is being read or when browsing. Such action may damage the memory card/USB device.
- Do not touch the terminals on the back of the card.
- Always insert a card in the correct direction. Failure to do so may result in damage to the card and the unit.
- Do not subject the card to excessive pressure or strong impacts.
- Malfunctions of the unit or card may result in data loss or damage to the card.
- Philips shall not accept any liability for damage or loss of stored data.

Warning:
Memory cards can be swallowed by young children. Do not allow children to handle memory cards. Please, remove the memory card immediately after use.



Multimedia Browser menu

1. Insert a USB device or memory card.
2. Select the USB device or memory card under Multimedia with the cursor up/down.
   The Multimedia browser will allow the user to browse content stored on the inserted USB device or memory card.
   Press the cursor right.
3. The 2-panel browser will be shown with the left panel containing the content types (Music, Picture).
   The right panel will display the content that is available of the selected content type.
4. Press the cursor up/down to select a content type and press the cursor right to enter the content.
5. Press the cursor up/down to select a file or a directory.
   Note: Press the green colour key to display all the image files in the current directory as thumbnails when browsing pictures. Press the green key again to display the image files in a list.
6. In case a **file** is selected, press the **OK** key to display a picture file or to play an audio file.
   In case a directory, album or playlist is selected, press the cursor right to enter the content or press the **OK** key to start a slide show or a loop playback of the files present in the directory, album or playlist.
7. Press the cursor left to keep music playing and switch back to the Multimedia menu.
8. Press one of the colour keys on the remote control to perform the corresponding function mentioned at the bottom of the screen.
   Note: The blue colour key can, if necessary, be used to let the colour keys re-appear.
9. To stop playing content, press the ■ key on the remote control.

Notes:

- ***Your TV supports slide shows with background music.*** *See Annex 2, p. 40.*
- *The playback will continue to play even if temporarily switched to browser screens. The audio will be stopped when another song starts playing, or when the end has been reached.*
- *Progressive JPEG files are not supported.*
- *The length of the files should not exceed 128 characters.*
- *Do not use a dot "." in folder naming.*
- *More technical remarks can be found in Annex 3, p. 42.*

Following icons may appear:

- folder
- pictures
- music
- self made playlist/album

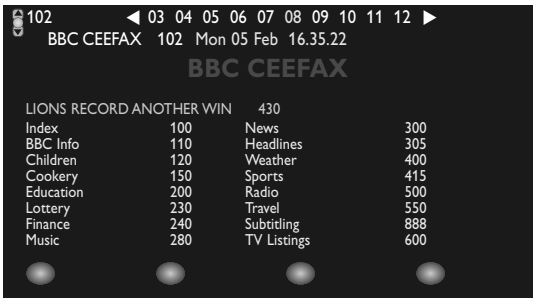
Function keys at the bottom of the screen

Details	to display a description of the selected file or directory;
Transitions	to select if a transition during a slide show should be applied;
Slide time	to select the duration a picture will be displayed in a slide show;
Rotate	to rotate a picture;
Repeat one/all	to repeat the playback of a music file;
Shuffle	to shuffle music collections in a random way;
Zoom	to select one of the zoom magnifications (x1, x2, x4) with the cursor keys up/down. Additionally you can shift the selected zoom window over the screen with the cursor keys left/right.

Other function keys on the remote control

■	to stop displaying content;
❚❚	to pause displaying content;
▶	to play a single file, start a slide show, playback of a folder or other collection.

Teletext



Most TV channels broadcast information via teletext. This TV has a 1200 pages memory that will store most broadcasted pages and subpages to reduce waiting time. After each programme change, the memory is refreshed.

Switch Teletext on and off

Press ☰ to switch the teletext on.

Select a Teletext page

- Enter the desired page number with the digit keys or with the **-P+** key.
- Select the options at the bottom of the screen with the colour keys.

Previously selected teletext page

Press the P↤P key.

Select the index teletext page

Press the grey colour key ☰ to display the main index (usually p.100).

Only for T.O.P teletext broadcasts:

Press ☰+. A T.O.P. overview of the teletext subjects available is displayed. Select with the cursor up/down, left/right the desired subject and press the **OK** key.
Not all TV channels broadcast T.O.P. teletext.

Select subpages

When a selected teletext page consists of different subpages, a list of available subpages appears on the screen.
Press the cursor left or right to select the next or previous subpage.

Picture/Teletext

1. Press the ☰ key. Press the 12 key to show Teletext on the right of the screen.
2. Press the 12 key to return to a full teletext picture.
3. Press the ☰ key to return to a full screen picture.

Enlarge a Teletext page

Press ⇔ repeatedly to display the upper teletext part, the lower teletext part and then to return to the normal teletext page size. When the teletext page is enlarged, you can scroll the text, line by line using the cursor up/down.

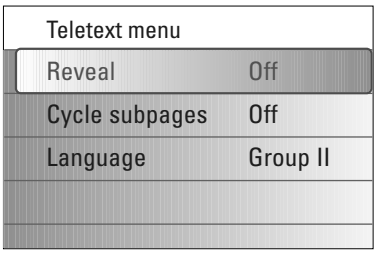
Hold

Press the ■ key to stop the pagecounter from seeking when you have entered a wrong pagenumber or when the page is not available.
Enter another page number.

Hypertext

With hypertext you can quickly jump to a pagenumber or search for a specific word shown on the current teletext page.

1. Press the **OK** key to highlight the first word or a number on the page.
2. Use the cursor up/down, left/right to select any other word or number you want to search for.
3. Press the **OK** key to confirm. The search starts.
   A message appears at the bottom of the screen to indicate the searching, or that the word or page is not found.
4. Use the cursor up to exit hypertext.



Teletext menu

The Teletext menu offers various functions to control teletext.

1. Switch teletext on and press the **MENU** key to activate the menu.
2. Press the cursor up/down to select the menu items.
3. Press the cursor right or the **OK** key to activate.
4. Press the **MENU** key to leave the teletext menu.

Reveal

Reveals/conceals hidden information on a page, such as solutions to riddles and puzzles.

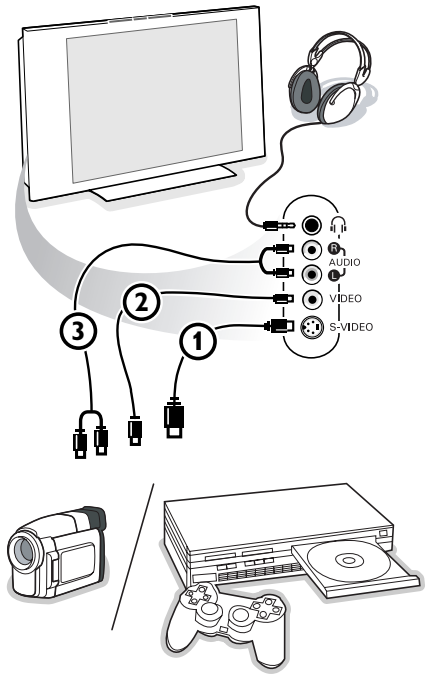
Cycle subpages *(if subpages are available)*

Makes the subpages cycle automatically.
Press the cursor right or the **OK** key to activate and to deactivate again.

Language

If the displayed characters on screen do not correspond with the characters used by the teletext broadcaster, you can change the language group here.
Select **Group 1** or **Group 2** with the cursor right.

Equipment to connect to the side connections



Camera, Camcorder, Game

1. Connect your camera, camcorder or game as shown.
2. Connect to **VIDEO** ② and **AUDIO L** ③ for mono equipment.
   For stereo equipment also connect **AUDIO R** ③.
   S-VHS quality with an S-VHS camcorder is obtained by connecting the S-VHS cables with the **S-VIDEO** input ① and **AUDIO** inputs ③.
   Do not connect cable ① and ② at the same time. This may cause picture distortion !

Headphone

1. Insert the plug into the headphone socket as shown.
2. Press on the remote control to switch off the internal loudspeakers of the TV.
   The headphone impedance must be between 8 and 4000 Ohm. The headphone socket has a 3.5 mm jack.
   In the Sound menu select **Headphone volume** to adjust the headphone volume.

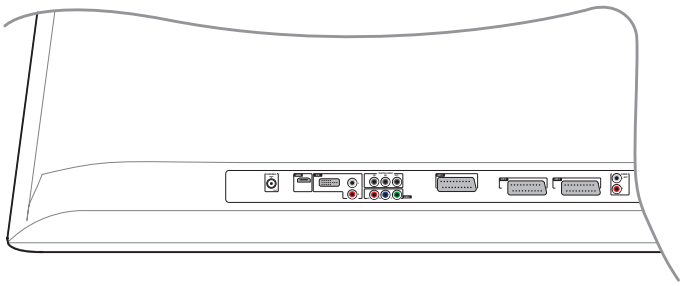
Connect Peripheral Equipment

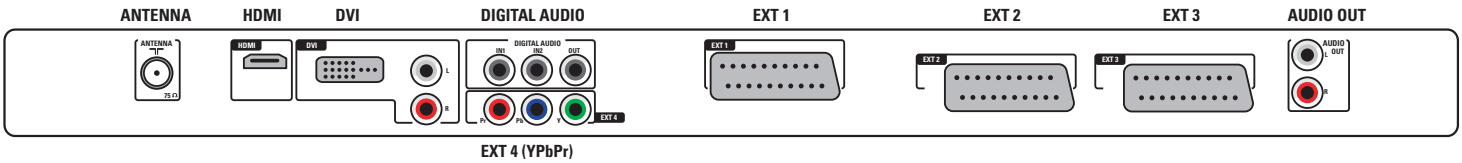
There is a wide range of audio and video equipment that can be connected to your TV.
The following connection diagrams show you how to connect them.

Note:
EXT1 *can handle CVBS, RGB and Audio L/R;*
EXT2 *CVBS, S-VIDEO, RGB and Audio L/R;*
EXT3 *CVBS and Audio L/R;*
EXT4 *YPbPr;*
DVI *(analogue and digital) and* ***HDMI*** *(digital);*
Side *S-VIDEO or CVBS and Audio L/R.*

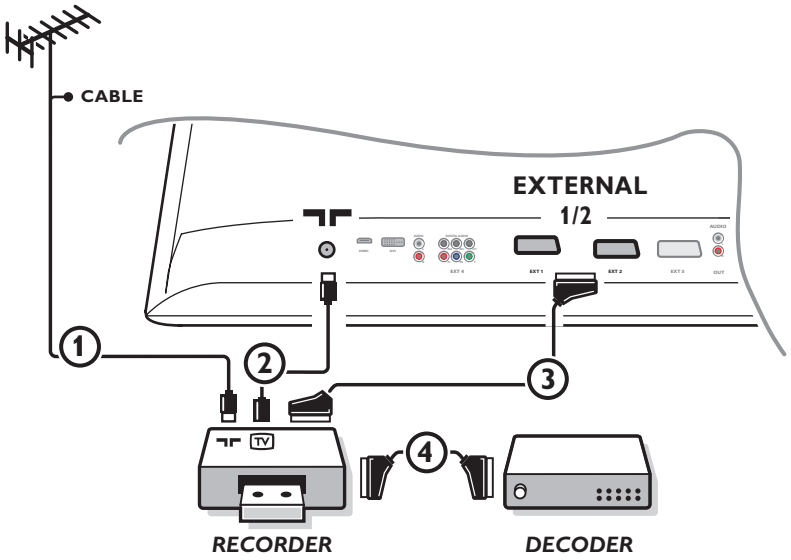
It is preferable to connect peripherals with RGB output to ***EXT1*** *or* ***EXT2*** *as RGB provides a better picture quality.*

Note: If your recorder is provided with the EasyLink function, it should be connected to ***EXT2*** *to benefit from the EasyLink functionality.*





Recorder (VCR-DVD+RW)



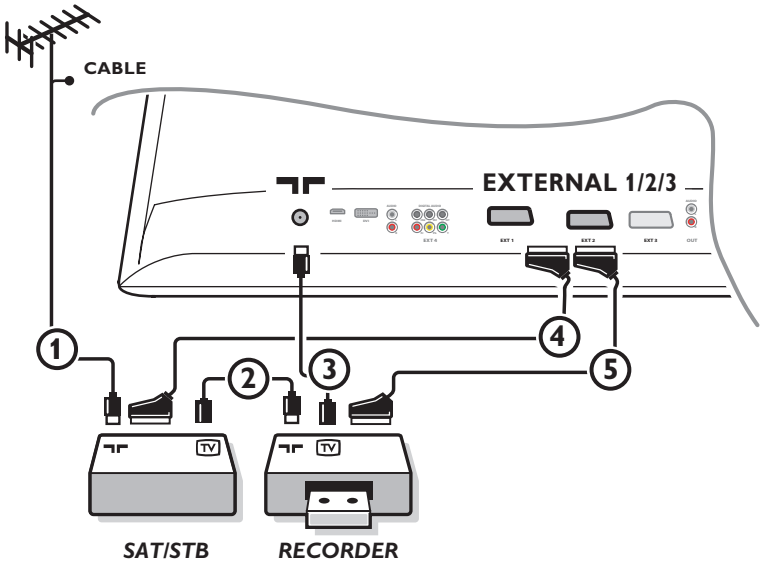
Note: Do not place your recorder too close to the screen as some recorders may be susceptible for signals from the display. Keep a minimum distance of 0,5 m from the screen.

Connect the aerial cables ①, ② and, to obtain the optimum picture quality, eurocable ③ as shown.
If your recorder does not have a euroconnector, the only possible connection is via the aerial cable. You will therefore need to tune in your recorder's test signal and store the test signal under a programme number between 90 and 99, see Manual installation, p. 8.
See the handbook of your recorder.

Decoder and Recorder

Connect a eurocable ④ to your decoder and to the special euroconnector of your recorder. See also the recorder handbook.
See Decoder, p. 13. You can also connect your decoder directly to **EXT1** or **2** with a eurocable.

Recorder and other equipment



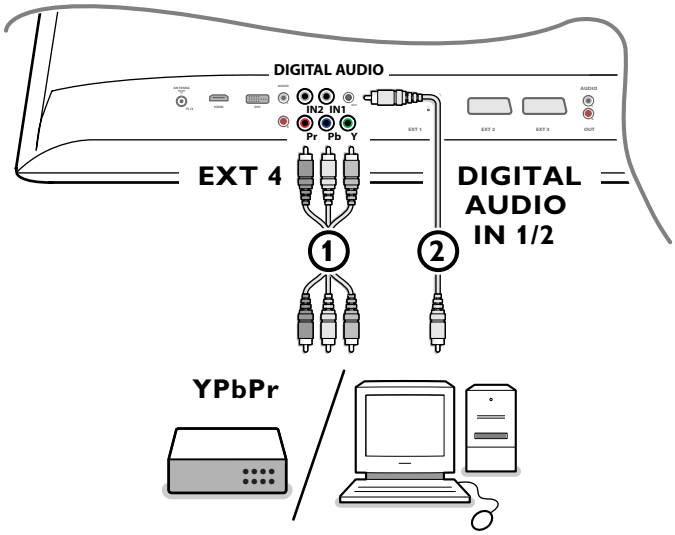
❶ Connect the aerial cables ①, ② and ③ as shown (only if your peripheral has TV aerial in-/output).
Connect your recorder to **EXTERNAL 2** with a eurocable ⑤.
Connect the other equipment with a eurocable ④ to one of the euroconnectors **EXTERNAL 1** or **EXTERNAL 3** to obtain a better picture quality.

If your recorder does not have a euroconnector, the only possible connection is via the aerial cable. You will therefore need to tune in your recorder's test signal and store the test signal under a programme number between 90 and 99, see Manual installation, p. 8.
See the handbook of your recorder.

❷ Make a selection in the Setup, Source menu, p. 13.

DVD Player or other peripheral digital source equipment

Equipment with Component Video Output Connectors (YPbPr)



❶ Connect the three separate component video cables ① to the peripheral equipment having component video outputs (YPbPr), such as DVD-players, laser-disc players, videogame players, satellite receivers or other equipment, and to the **Y**, **Pb** and **Pr** jacks of **EXT4** on the TV.
*Note: **EXT4** should always be used together with digital audio.*

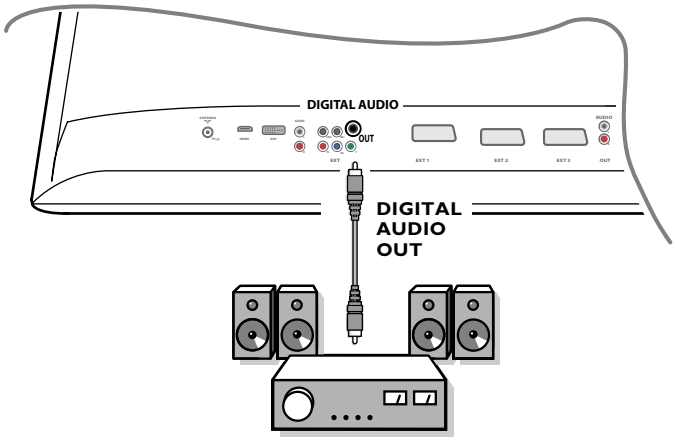
❷ Connect the audio cable ② to the **DIGITAL AUDIO OUT** of the peripheral equipment and to one of the **DIGITAL AUDIO IN** connectors of the TV.

Notes
- *If necessary, you can adjust the picture position to the centre of the screen with the cursor keys.*
- *The labels for the component video sockets may differ depending on the DVD player or the peripheral equipment connected. Although the abbreviations may vary, the letters B and R stand for the blue and red component signals, respectively, and Y indicates the luminance signal. Refer to the DVD player's or peripheral equipment instructions for use for definitions and connection details.*
- *This television is designed to accept high definition signal standards 480p, 576p, 720p and 1080i as specified by the Electronic Industries Association standard EIA770.3.*
Digital peripheral equipments from different manufacturers have the possibility of differing output standards which may cause difficulties for the television to properly display.

***Warning**: in case you notice scrolling images, wrong colours or no colour, no picture, or even combinations of these on your screen, check if the connections are done in the correct way or move your digital equipment further away from your TV.*

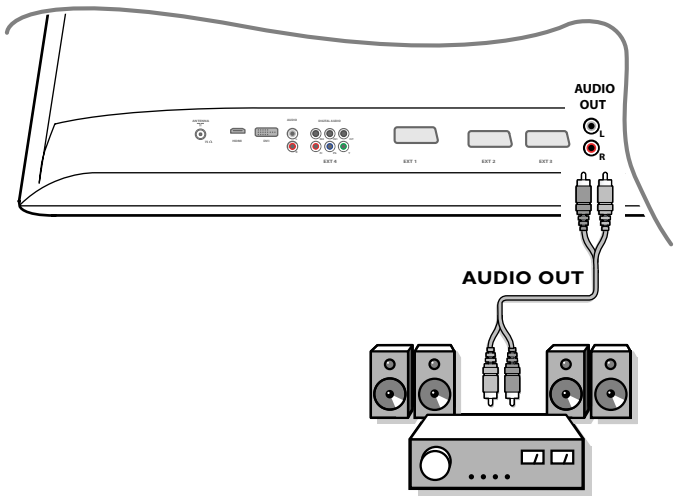
MultiChannel Surround receiver

• Digital MultiChannel Surround receiver



Connect a digital MultiChannel Surround receiver to the **DIGITAL AUDIO OUT** connector at the bottom of the TV.

• Analogue MultiChannel Surround receiver

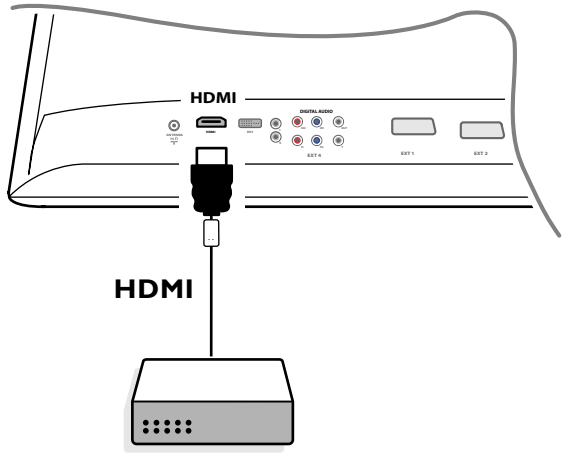


Connect an analogue MultiChannel Surround receiver to the **AUDIO OUT L** and **R** connectors at the bottom of the TV. The volume has to be controlled via the MultiChannel Surround receiver.

Note: No sound will be heard when a TV channel or external source is locked via the Features/Child lock menu (see p. 17).

Equipment to connect to a HDMI (High Definition Multimedia Interface) connector

HDMI is the leading new standard for Digital video and audio interconnection.
To the **HDMI** connector you can connect HDMI peripheral equipments such as compatible DVD-R or DVD player with HDMI.
So you can display high-definition pictures on this TV in the digital form.

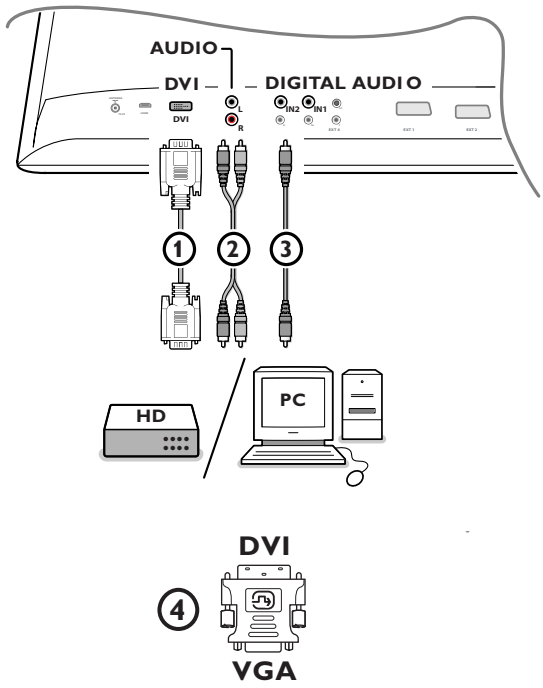


❶ Connect your HDMI equipment with the **HDMI** connector.
❷ Select the connected digital peripheral equipment in the Setup, Source menu, p. 13.

The **HDMI IN** connector allows the following TV and monitor display modes:

HD	Standard Definition TV (SDTV)	640x480i 720x480i 720x576i
	Enhanced Definition TV (EDTV)	640x480p 720x480p 720x576p
	High Definition TV (HDTV)	1920x1080i 1280x720p
PC	VGA 640x480 SVGA 800x600 XGA 1024x768	

Notes:
- *If necessary, you can adjust the picture position to the centre of the screen with the cursor keys.*
- *Due to legal requirements, it is possible that with certain copy protected PCM audio qualities from a peripheral equipment connected to the **HDMI** input, the Digital audio output signal is muted.*
- *Your TV supports HDCP (High-bandwidth Digital Content Protection). This is a system for protecting DVD content outputted via DVI from being copied. It provides a secure digital link between a video source (DVD, PC, etc.) and your TV. Content is encrypted at the source peripheral equipment to prevent unauthorised copies from being made.*
- *Proper working is only guaranteed with HDMI compliant consumer products. Limit the cable length to maximum 5 m.*
- *Digital peripheral equipments from different manufacturers have the possibility of differing output standards which may cause difficulties for the television to properly display.*
- *In case no signal is detected from your HDMI equipment, switch off the HDMI equipment and then on again.*
  To get an optimal viewing, it is advised to switch your DVD player to one of the following TV display standards: 1920x1080i, 1280x720p, 720x576i, 720x576p, 720x480i, 720x480p.



Equipment to connect to a DVI connector

The **DVI** connector allows the following TV and monitor display modes, via the ⊣ key on the remote control, for High Definition (HD) and computer (PC) equipment:

HD	Standard Definition TV (SDTV)	640x480i 720x480i 720x576i
	Enhanced Definition TV (EDTV)	640x480p 720x480p 720x576p
	High Definition TV (HDTV)	1920x1080i 1280x720p

PC	VGA	640x480
	SVGA	800x600
	XGA	1024x768

Note: If necessary, you can adjust the picture position to the centre of the screen with the cursor keys.

❶ Connect your equipment to the **DVI** connector of your TV ①.
According to the type of connector of your equipment, you may have to use an appropriate adapter.

DVD
Connect the DVI to DVI cable to the **DVI** connector of your TV ①.

Computer (PC):
- with a DVI connector: connect the DVI to DVI cable to the **DVI** connector of your TV ①.
- with a VGA connector: connect the VGA cable to a VGA to DVI adapter ④ and connect to the **DVI** connector of your TV ①.

❷ Connect the audio cable ② to the **DVI AUDIO R** (right) and **L** (left) inputs of the TV when the TV expects analogue audio for a connected peripheral equipment to come from an analogue audio input

OR

Connect the audio cable ③ to one of the **DIGITAL AUDIO IN** connectors of the TV when the TV expects digital audio for a connected peripheral equipment to come from a digital audio input.
Then also make your selection of the source to which the peripheral equipment with digital audio input has been connected in the Setup, Source menu. See Digital audio, p. 13.

Record with your recorder

• Record a TV programme with your recorder without EasyLink

You can record a TV programme using your recorders tuner without affecting your TV.

1. Select the channel number on your recorder.
2. Set your recorder to record.
   See the handbook for your recorder.

Switching channel numbers on your TV does not disturb recording !

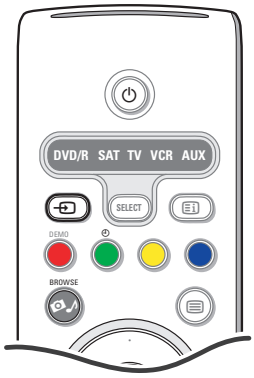
• Record a TV programme with your recorder with EasyLink

In TV mode, it is possible to start a direct recording of the programme which is being displayed on the TV screen.
Continue to press the ● key on the remote control for more than 2 seconds.

Notes:

- *Switching programme numbers on your TV does not disturb recording.*
- *When recording a programme from a peripheral connected to **EXT1**, **EXT3**, **EXT4** or **Side**, you can not select another TV programme on the screen without disturbing the recording.*
- *If your EasyLink recorder has the system standby function, when you press the ⏻ key for 3 seconds, both the TV and the recorder are switched to standby.*
- *If you have connected an S-VHS recorder provided with the EasyLink function, you can record S-VHS quality from an S-VHS peripheral connected to the left side of the TV. (E.g. from an S-VHS camcorder.)*

To select connected equipment



1. Press the ⇥ key and then press this key repeatedly or select **Source** in the Settings menu (see p. 13) to select **EXT1**, **EXT2**, **EXT3**, **EXT4**, **DVI**, **HDMI**, **Side** or **TV**, according to where you connected your peripheral equipments.
2. Press the cursor up/down.
3. Press **OK**.

Audio- and video equipment keys

Most of the audio and video equipment from our range of products can be operated with the remote control of your TV.

Normal mode

Press one of the keys after you pressed the **SELECT** key repeatedly according to the equipment you want to operate with this remote control. See Use of the remote control, p. 4.

- ⏻ to switch to standby
- ⏸ for pause,
- ● for record,
- ◀◀ for rewind (**VCR**, **CD**); search down (**DVD**)
- ■ for stop,
- ▶ for play,
- ▶▶ for fast forward (**VCR**, **CD**); search up (**DVD**)
- i+ to display information
- **MENU** to switch the menu on or off
- **- P +** for chapter, channel, track selection
- 0 to 9 digit entry,
- cursor up/down to select the next or the previous disc (**CD**)
- cursor left/right to select the previous or following track (**CD**)
- P↤P to select a DVD title/chapter; index (**AUX**)
- ☰ to select your choice of subtitle language (**DVD**)

Notes:

- *If no action is being undertaken within 60 seconds, the remote control returns to TV mode.*
- *After an action in the selected system mode, the remote control will remain in this mode for 60 seconds and will then return to TV mode or press the **SELECT** key to return to TV mode immediately.*

Expert mode

When you do not want the remote to go back to TV mode, and to stay in the mode selected, proceed as follows:

1. Select **TV** mode with the **SELECT** key.
2. Press the **SELECT** key again simultaneously with the **OK** key for at least 2 seconds.
3. Select the desired mode with the **SELECT** key.

The remote will not go back to TV mode from now on and will remain in the mode selected. To go back to the default setting of the remote (TV mode) repeat what is explained above, selecting the TV mode.

Note: LED behaviour

- *If the LED blinks **once** after pressing the **SELECT** key simultaneously with the **OK** key for at least 2 seconds, the remote control is in **Expert mode** and the remote control remains in the mode selected.*
- *If the LED blinks **4 times** after pressing the **SELECT** key with the **OK** key for at least 2 seconds, the remote control is in **Normal mode** and the remote control returns to TV mode after 60 seconds.*

Direct selection of a connected peripheral equipment

When the remote is in **TV Expert mode** you may directly select a connected equipment in the following way:
Press:

- The ⏎ key followed by digit '**1**' to select the device connected to **EXT1**.
- The ⏎ key followed by digit '**2**' to select the device connected to **EXT2**.
- The ⏎ key followed by digit '**3**' to select the device connected to **EXT3**.
- The ⏎ key followed by digit '**4**' to select the device connected to **EXT4**.
- The ⏎ key followed by digit '**5**' to select the device connected to **DVI**.
- The ⏎ key followed by digit '**6**' to select the device connected to **HDMI**.
- The ⏎ key followed by digit '**0**' to select the device connected to the side.

Note: Make sure your equipment is switched on.

Setting the remote control to work peripheral equipment

Your TV remote control gives you the opportunity to control all your peripheral equipments with one single remote control. This can be done by selecting the correct brand and type out of the list of Direct Entry codes for peripheral equipments.

Press the **SELECT** key repeatedly to select **DVD/R**, **SAT**, **VCR** or **AUX** according to the peripheral equipment you want to operate with this remote control. See Use of the Remote control, p. 4. If the function keys on the remote control also work the selected peripheral equipment, then the remote is ready and no further steps are needed.

If the function keys do not work with the selected peripheral equipment, according to the equipment(s) you own, you may make your remote control ready for them by a direct entry code. Proceed as following.

Code setup

1. Press the **SELECT** key repeatedly to select your source according to the peripheral equipment you want to operate with this remote control.
2. Press the **SELECT** and ⏻ key at the same time for longer than 4 seconds. The selected mode LED will lit constantly.
3. Input the 3-digit code for the type and brand of peripheral equipment. The codes are listed on page 33.
4. The selected mode LED will blink fast for 5 seconds as a confirmation you entered a correct code. The remote will go back to the last selected mode. If you entered a wrong code the mode LED will stay on for 2 seconds. Redo step 3.
5. Now you will try to use the TV remote with the peripheral equipment. Press the **SELECT** key repeatedly to select the desired mode. The selected mode LED will stay on for 2 seconds and then begin blinking. The blinking means that the remote is in the external mode you have selected.
6. Within 60 seconds from the time the blinking starts, point the remote toward the peripheral equipment and press the ⏻ key. If the peripheral equipment does not respond to the ⏻ command, follow the steps for programming the remote again using a different setup code for the type and brand of peripheral equipment you wish to operate. Refer again to the code list on page 33. If no more codes are listed for the type and brand of external equipment, the remote likely will not operate your particular model of peripheral equipment.

Notes:

- *Your TV remote is not necessarily capable of being programmed to operate all models of the brands of peripheral equipments listed on page 33. You may want to try the programming process again. Try using the number(s) that are listed for your type and brand of peripheral equipment to be sure you did not make a mistake in inputting the digits during your first attempt at programming.*
- *If the remote control is in one of the external modes (a mode light is flashing) — DVD/R, SAT, VCR or AUX — and you don't press any of the remote keys for sixty seconds, a "time-out" occurs, returning the remote to TV mode.*

To cancel the selected mode

Press the **SELECT** key for 2 seconds.
The remote control will return to TV mode.

Remote Control Direct Entry Codes for Peripheral Equipment

CD

Bose....512
Hitachi....501
JVC....504
Kenwood....502
Panasonic....505
Philips....500
Pioneer....511
Samsung....506
Sharp....507
Sony....508
Technics....509
Thomson....503
Yamaha....510

Digital Video Disc (DVD)

Aiwa....502
Alba....503, 504
Bush....505
CyberHome....506, 507
Daewoo....508
Dansai....509
Denon....543
Goodmans....510
Grundig....511, 512
Hitachi....513
JVC....514, 515
Kenwood....540
LG....516, 517, 518
Mustek....519, 544
Panasonic....520, 522, 523, 541
Philips....500, 524
Pioneer....525
Samsung....526, 527, 528
Sanyo....529
Scott....530
SEG....531, 532
Sharp....533
Sony....534, 535, 536
Thomson....501
Toshiba....537, 538
Yamaha....539

Satellite Receiver

Akai....500
Alba....501, 502, 503
Allsat....500
Amstrad....505, 524
Ankaro....507
Anttron....501, 503
Apollo....501
Armstrong....505
Asat....500
Astra....505
Astro....503, 504, 507, 510
Audio Ton....503
Best....507
Blaupunkt....510
Brain Wave....511
BSkyB....524
Bush....502, 512
CityCom....502
Clatronic....511
Condor....507
Crown....505
Daeryung....509
DNT....500, 509
Echostar....509, 515
Einhell....501, 505
Elta....500, 501, 507
Emme Esse....507, 512
Ep Sat....502
Eurosat....505
Eurosky....505, 507
Eurostar....505
Ferguson....502, 512, 519
Finlandia....502
Finlux....502
Fuba....500, 501, 507, 509, 510
Galaxis....507
GMi....505
Goodmans....502
Grundig....502, 503, 510, 512, 518, 524
Hanseatic....513
Hirschmann....510
Hisawa....511
Hitachi....502, 512
Huth....505, 511
Intertronic....505
Johansson....511
Kathrein....500, 510, 520
KR....503
Kreiselmeyer....510
Kyostar....501
Lasat....504, 507
Lenco....501
Macab....519
Manhattan....502, 504, 512
Marantz....500
Mascom....504
Maspro....502, 512
Mediamarkt....505
Medion....507, 513, 515, 516
Metronic....501, 503, 504, 522
Metz....510
Minerva....510
Mitsubishi....502, 510
Morgan's....500, 505
Nikko....505
Nokia....502, 512, 514
Nordmende....501, 502, 504, 519
Novis....511
Octagon....501, 503
Okano....505
Orbitech....501
Otto Versand....510
Pace....502, 510, 512, 524
Palladium....505
Panasonic....502, 512, 524
Panda....502
Philips....500, 502, 506, 512, 517
Phonotrend....502
Predki....511
Provision....504
Quadral....507
Quelle....510
Radiola....500
Radix....509
RFT....500
Saba....504, 512
Sabre....502
Sagem....519
Samsung....501
Satcom....511, 513
SatPartner....501, 503, 504, 511
Schneider....507, 515, 516
Seemann....505, 509
SEG....501, 507, 511, 513, 523
Siemens....510
Skymasters....513, 515, 516, 521, 528
Sony....528
Strong....501, 503, 507
Sunstar....505
Tandberg....519
Tandy....503
Tantec....502, 512
TechniSat....509
Teco....505
Telasat....513
Telefunken....501, 512
Teleka....503, 505, 509
Telemaster....504
Telesat....513
Televes....502
Thomson....502, 519, 525, 526, 527
Thorn....502, 512
Tonna....502
Triax....510
Unisat....505
Unitor....511
Universum....510
Visiosat....511, 515
Vortec....501
Wewa....502
Winersat....511
Wisi....502, 509, 510
Zhnder....504, 507, 522

VCR

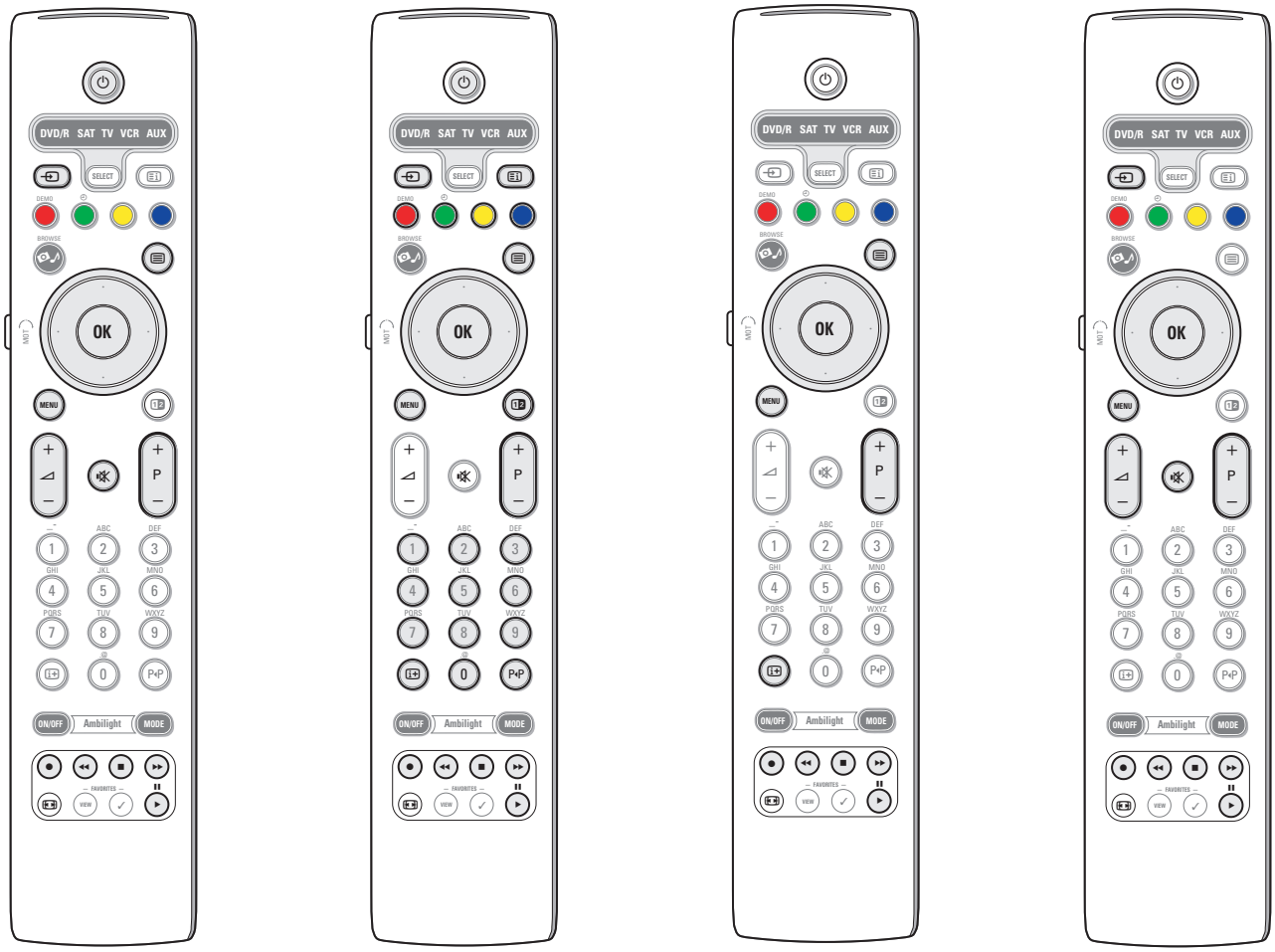
Daewoo....502, 503
Hitachi....505
JVC....506
LG....508, 509
Loewe....538
Panasonic....511, 512, 513, 514, 515, 516, 517, 518, 538
Philips....500, 519, 520, 521, 522, 523
Saba....539
Samsung....525
Sony....527, 528, 529, 530, 531
Thomson....533, 536, 537, 539
Toshiba....534, 535

Learnable remote control

Your TV remote control supports a learnable function which makes it possible to read out codes coming from another remote control from equipment from another brand.
This makes it possible to use only one remote control to control all your other connected peripheral equipment.
For the following equipment the highlighted keys are programmable.

Note: You can put whatever function of your other device remote under one of the highlighted keys.

DVD/R **SAT** **VCR** **AUX**



1. Press the **SELECT** key of your TV remote control repeatedly to select your destination source (e.g. DVD, VCR,...).
2. Press the **OK** key and the ⏻ key simultaneously for at least 4 seconds.
   The LED of the selected source on your TV remote control will light up constantly.
3. Press a valid destination key on your TV remote control under which you want to copy a certain function from the remote control of the selected external equipment.
4. Place both remote controls face to face so that the infrared signals can be exchanged.
5. Press for about 2 seconds on the remote control of your external device the function key you want to be learned by your TV remote control.
   The LED of the selected source on your TV remote control is blanked during the capture of the signal.
   When the function is copied, the LED is lit again.
6. Repeat steps 3 to 5 again to copy other functions.
7. **To exit the learnable mode:**
   Press the key at the side of your TV remote control for about 2 seconds.
   Your remote control will remain the last selected mode.
   Note: If a code from the remote control of your external equipment is not recognised by the TV remote control, the LED of the selected source will blink for a few seconds. This means that the code transfer did not succeed.

To put the remote control function keys back to the factory mode

1. Press the **SELECT** key repeatedly to select **TV** mode.
2. Press the **OK** key and the 🔇 key simultaneously for at least 5 seconds.
   All the **SELECT** LEDS will light up.
3. Press the **SELECT** key
   - 1x: **DVD/R** is lit up
   - 2x: **SAT** is lit up
   - 3x: **VCR** is lit up
   - 4x: **AUX** is lit up
   - 5x: **DVD/R**, **SAT**, **VCR**, **AUX** are lit up.
4. Press the **OK** key when one or all mode LEDS are lit.
   The function keys which were 'learned' will be erased or from the selected destination source or from all the external equipment at once. All the keys from the TV remote control will have their factory function again.

Tips

Symptoms	Items to Check and Actions to follow
Poor Picture	• Have you selected the correct TV system in the manual installation menu? • Is your TV or house aerial located too close to loudspeakers, non-earthed audio equipment or neon lights, etc.? • Mountains or high buildings can cause double pictures or ghost images. Sometimes you can improve the picture quality by changing the direction of the aerial. • Is the picture or teletext unrecognisable? Check if you have entered the correct frequency. See Installation, Manual installation, p. 8.
No Picture	• Are the supplied cables connected properly ? (The aerial cable to the TV, the other aerial to your recorder, the power cables.) • Has the child lock been switched off ? • In case of weak or bad signal, consult your dealer. • Check if you selected the correct source.
No photo, music or video play or in poor quality only	• Check if the source complies with a supported code.
Digital distortion	• The low quality of some digital picture material may be the cause of digital image distortion. In this case select the Soft setting using the Picture menu, Smart Picture, without changing the picture settings manually. • Select Digital STB in the Source menu (p. 13) to automatically switch to the Soft setting.
No sound	• No sound on any channel? Check the volume isn't at minimum. • Is the sound interrupted with the mute key ?
Good sound but poor colour or no picture	• Adjust the contrast, colour, tint and brightness setting. Try another smart picture setting.
No solution found for your picture or sound problem ?	Switch your TV off and then on again once. Never attempt to repair a defective TV yourself. Check with your dealer or call a TV technician.
Remote control	• Check if the remote control is in the correct mode. • If your TV no longer responds to the remote control, the batteries may be dead. • You can still use the **MENU** key and the -/+ keys on top of your TV.
Standby	Your TV consumes energy in the standby mode. Energy consumption contributes to air and water pollution. Power consumption: < 1 W
No stable or not synchronised VGA picture	• Check if you have selected the correct VGA mode in your PC. • See HDMI connector, p. 28.
Control of peripheral equipment	The infrared signals of the screen may influence the reception sensibility of other peripherals Solution: replace the batteries of the remote control of other peripheral equipment. E.g. keep away a wireless headphone from within a radius of 1 meter.

België / Belgique
070 222 303 €0.17/min

Danmark
3525 8759 Local

Deutschland
0180 5 356 767 €0.12/min

France
08 9165 0005 €0.23/min

ΕΛΛΑΣ
0 0800 3122 1280 Δωρεάν

España
902 888 784 €0.15/min

Ireland
01 601 1777 Local

Italia
199 404 041 €0.25/min

Luxembourg
40 6661 5644 Local

Nederland
0900 8407 €0.20/min

Norge
2270 8111 Local

Österreich
0820 901114 €0.20/min

Portugal
2 1359 1442 Local

Schweiz / Suisse / Svizzera
0844 800 544 Local

Svenska
08 5792 9100 Local

Suomi
09 2311 3415 Local

United Kingdom
0906 1010016 £0.15/min

Care of the screen

Do not touch, push or rub or strike the screen with anything hard as this may scratch, mar or damage the screen permanently. And please do not rub with dust clothes with chemical treatment.
Do not touch the surface with bare hands or greasy cloth (some cosmetics are detrimental to the screen).
Unplug the TV before cleaning the screen.
When the surface becomes dusty, please wipe gently with absorbent cotton or other soft materials like chamois soaks.
Do not use acetone, toluene and alcohol because they cause chemical damage.
Do not use liquid cleaners or aerosol cleaners.
Wipe off saliva or water drops as soon as possible. Their long time contact with the screen causes deformations and colour fading.

Stationary images on the TV screen

A characteristic of LCD and Plasma Panels is that displaying the same image for a long time can cause a permanent after-image to remain on the screen. This is called phosphor burn in. Normal use of the TV should involve the showing of pictures that contain constantly moving and changing images that fill the screen.
Examples of stationary images (this is not an all-inclusive list, you may encounter others in your viewing):

- TV and DVD menus: listings of DVD disk content;
- Black bars: when black bars appear at the left and right side of the screen, it is recommended to change to a picture format so that the picture fills the entire screen;
- TV channel logo: present a problem if they are bright and stationary. Moving or low-contrast graphics are less likely to cause uneven aging of the screen;
- Stock market stickers: presented at the bottom of the TV screen;
- Shopping channel logos and pricing displays: bright and shown constantly or repeatedly in the same location on the TV screen. Examples of still pictures also include logos, computer images, time display, teletext and images displayed in 4:3 mode, static images or characters, etc.

Carefully pay attention to these remarks. The guarantee does not apply to damage caused by not taking into account the above mentioned safety warnings on stationary images.

Tip: reduce contrast and brightness when viewing.

Electric, Magnetic and Electromagnetic Fields ("EMF") Electric, Magnetic and Electromagnetic Fields ("EMF")

- Philips Royal Electronics manufactures and sells many products targeted at consumers, which, like any electronic apparatus, in general have the ability to emit and receive electro magnetic signals.
- One of Philips' leading Business Principles is to take all necessary health and safety measures for our products, to comply with all applicable legal requirements and to stay well within the EMF standards applicable at the time of producing the products.
- Philips is committed to develop, produce and market products that cause no adverse health effects.
- Philips confirms that if its products are handled properly for their intended use, they are safe to use according to scientific evidence available today.
- Philips plays an active role in the development of international EMF and safety standards, enabling Philips to anticipate further developments in standardisation for early integration in its products.

How to dispose of batteries?

The batteries supplied do not contain the heavy metals mercury and cadmium. Nevertheless in many areas batteries may not be disposed of with your household waste. Please ensure you dispose of batteries according to local regulations.

Recycling

The packaging of this product is intended to be recycled. Apply to the local authorities for correct disposal.

Disposal of your old product

Your product is designed and manufactured with highly quality material and components, which can be recycled and reused. When this crossed-out wheeled bin symbol is attached to a product, it means the product is covered by the European Directive 2002/96/EC. Please inform yourself about the local separate collection system for electrical and electronic products. Please act according to your local rules and do not dispose of your old products with your normal household waste. The correct disposal of your old product will help prevent potential negative consequences for the environment and human health.

Kensington Security Slot (if present)

Your TV is equipped with a Kensington Security Slot, to prevent it from getting stolen. An anti-theft Kensington lock has to be purchased separately.
The Kensington lock is a plastic-coated steel cable with a lock. One end has to be fixed to the opening of the TV and locked with a special key. The other end is attached to a fixed point.

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Annex 1 - Philips TV software upgrade with portable memory

Introduction

Philips offers software upgrade capability for your TV using portable memory.
After you have completed a software upgrade, your TV will typically perform better.
What improvements are made depends on the upgrade software you are using as well as the software your TV contained before the upgrade.
You can execute the software upgrade procedure yourself.
Be aware that the content of this document is addressing technical or software skilled users.

Preparing a portable memory for software upgrade

For the procedure you will require:
- A personal computer with web browsing capability.
- An archive utility that supports the ZIP-format (e.g. WinZip for Windows or Stuffit for Mac OS).
- A preferably empty USB memory stick or memory card (if available). Supported memory cards (if available): CompactFlash Card Type I & II, IBM Microdrive, Memory Stick, SecureDigital Card / Mini SD Card, SmartMedia Card, MultiMedia Card.
  Note: Only FAT/DOS-formatted portable memory is supported.

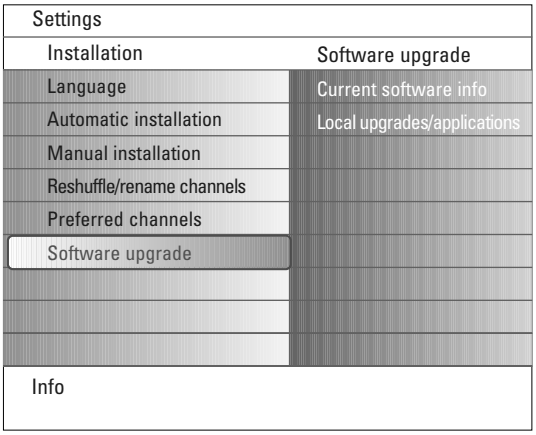
New software can be obtained from your dealer or can be downloaded from the www.philips.com/support website:

1. Go to **www.philips.com/support** using the web browser on your PC.
2. Follow the procedure to find the information and the software related to your TV.
3. Select the latest software upgrade file and download it to your PC.
4. Decompress the ZIP-file and copy the file "autorun.upg" to the root directory of the USB portable memory.
   Note: Only use software upgrades that can be found on the www.philips.com/support web site.

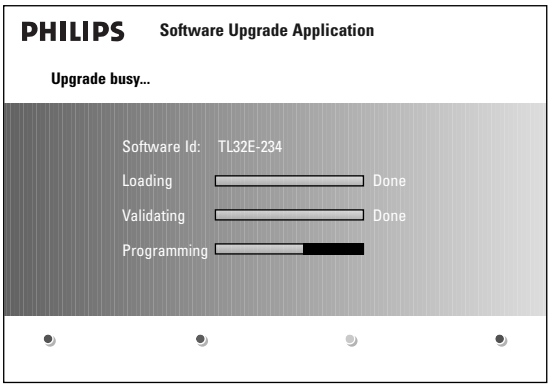
Verifying the version of the TV software

Before starting the software upgrade procedure, it is advised to check what the current TV software is.

1. Select **Software Upgrade** in the Installation menu.
2. Press the cursor right.
   The Software Upgrade menu moves to the left panel.
3. Select **Current Software Info** to observe the version and the description of the current software.



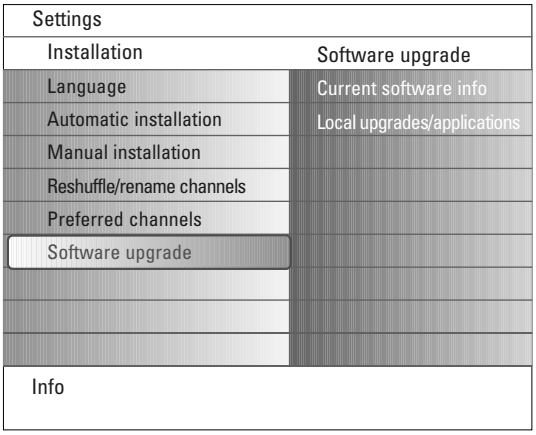
Automatic software upgrade procedure



1. Switch off your TV and remove all memory devices.
2. Insert the USB portable memory that contains the downloaded software upgrade.
3. Switch on your TV with the power key ⏻ at the top of the TV.
4. At startup the TV will scan the USB portable memory until it finds the update content. The TV will automatically go to the upgrade mode. After a few seconds it will display the status of the upgrade procedure.

   Warning:
   - *You are not allowed to remove the USB portable memory during the software upgrade procedure!*
   - *In case of a power drop during the upgrade procedure, don't remove the USB portable memory from the TV. The TV will continue the upgrade as soon as the power comes back.*
   - *If you try to upgrade to a software version lower than the current version, a confirmation will be asked. Downgrading to older software should only be done in case of real necessity.*
   - *If an error occurs during the upgrade you should retry the procedure or contact your dealer.*
5. When the software upgrade was successful, remove the USB portable memory and restart your TV with the power switch ⏻ at the top of the TV.
   Your TV will start up with the new software.
   Note: Once the upgrade is finished use your PC to remove the TV software from your USB portable memory.

Manual software upgrade procedure



For a manual software upgrade copy the "autorun.upg" file in a directory called "Upgrades" located in the root of the USB portable memory.

1. Insert the portable memory that contains the downloaded software upgrade.
2. Select **Software Upgrade** in the Installation menu. Go to **Local upgrades/applications**.
   The TV will list all compatible software available on the USB portable memory and display the data for each selected upgrade version.
3. Select the correct upgrade version and press the red colour key to start the upgrade.
   Your TV will restart and will automatically go to the upgrade mode. After a few seconds it will display the status of the upgrade procedure.
   Warning:
   If you try to upgrade to a software version equal or lower than the current version, a confirmation will be asked. Downgrading to older software should only be done in case of real necessity.
4. When the software upgrade was successful, remove the USB portable memory and restart your TV with the power switch ⏻ at the top of the TV. Your TV will start up with the new software.

Annex 2 - Philips TV Slideshow Format with background music

Notes:
- *The latest version of this document can be found on the Philips support website (www.philips.com/support). Use the type number of your TV (e.g. 32PF9830A/10) to find this documentation and other related files.*
- *Philips can't be held responsible for any problems that may occur as a result of the content in this document. Errors reported to Philips will be adapted and published on the Philips support website as soon as possible.*

Introduction

This document explains how to make a Philips slideshow file with background audio.
Be aware that the content of this document is addressing technical or software skilled users.
To start the slideshow open the slideshow file in the Multimedia browser of your TV.

1. Press the key on the remote control after having inserted a memory card or USB device and switched on the TV.
2. Go to where you stored the slideshow file (.alb) on your portable memory.
3. Select the slideshow file and press the **OK** key to start the slide show.
4. To stop a slide show, press the ■ key.

General Rules

- The slideshow will use plain ASCII XML syntax to allow the creation and editing of the slideshow files using simple tools.
- All references to network content must be based on the global address of the content.
- Content on a Portable Memory (PM) doesn't have a global address; as a result content from a PM can never be referenced from a slideshow not stored on the PM itself.
- To maintain portability, a slideshow stored on a PM should ONLY reference content on the same PM. Referencing global addresses can result in inconsistencies if the PM is used on a non-networked CE device. The latter is however not forbidden, it is only a recommendation.
- It is preferable that URL's referencing PM content are based on a relative path starting from the directory where the slideshow is stored. This path includes the device or drive name of the PM.
  An absolute path to content will also be supported.
  - relative path: pictures\test1.jpg, tamper.jpg, ..\new\bird.jpg, …
  - absolute path: USB1:\pictures1\foo_bar.jpg, C:\f1.jpg, \organization.jpg, …

General Format

The format and syntax below will be used to create the slideshow file (simple ascii text) with the extension .alb (.ALB)
Examples: slshow1.alb, summer_holiday_2004.ALB, test.alb, …
The following syntax should be used to create the text file:

```
<?xml version="1.0" encoding="ISO-885h9-1" ?>
<philips-slideshow version="1.0" >
  <title>Title of the slideshow</title>
  <audio>audio_url</audio>
  <slide-duration>30</slide-duration>
  <slides>
    <slide>slide_1_url</slide>
    <slide>slide_2_url</slide>
    <slide>slide_3_url</slide>
    <slide>slide_4_url</slide>
    <slide>slide_5_url</slide>
    <slide>slide_6_url</slide>
    ...
    <slide>slide_N-1_url</slide>
    <slide>slide_N_url</slide>
  </slides>
</philips-slideshow>
```

Supported XML-tags

The following table gives a description of the XML syntax.

Tag Name	Use	Description
philips-slideshow	mandatory	Philips slideshow signature including the version.
title	optional	The title of the playlist.
audio	optional	The audio-URL following this tag will define the music playing in the background during the slideshow. A single song or playlist (.m3u & .pls) are the only valid audio references. Other reference will not result in any audio playback. If a single song is referenced the song will be repeated forever. If a playlist is referenced the playlist will be played in sequence with a repeat at the end of the playlist.
slide-duration	optional	The default display time (in 0,1 second) of a slide. The TV application isn't obliged to support this tag. The TV application can force the use of one or multiple predefined display times.
slides	mandatory	Identifies the slides to show.
slide	optional	Identifies the URL of the individual slide.

Annex 3 - Philips TV - Portable Memory and USB

Notes:

- *The latest version of this document can be found on the Philips support website (www.philips.com/support).*
- *The software of your TV is upgradeable. If you have problems first check if you have the latest software installed on your TV. The latest software, together with instructions, can be found on the Philips support website.*
  Use the type number of your TV (37PF9730/10) to find this documentation and other related files.
- *Philips can't be held responsible neither for any errors in the content of this document nor for any problems as a result of the content in this document. Errors reported to Philips will be adapted and published on the Philips support website as soon as possible.*

Digital Content Issues

- Only FAT (DOS) formatted (initialized) portable memory is supported. Errors in this formatting can result in unreadable content. If such problems appear try to re-format the card. Be aware that formatting the card will also delete all the content on it (pictures, music, …).
- The following file types are supported: .jpg, .jpeg, .mp3, .alb, .m3u and .pls.
- Only linear JPEG picture formats are supported. Progressive JPEG encodings are not supported.
- The length of a filename or directory name is limited to the length specified by the FAT12/16/32 file systems.
- Max. levels of nested directories is 19.
- Never use the supported file type extensions (.jpg, .jpeg, .mp3, .alb, .m3u and .pls) as extensions for directories as these directories will be treated as corrupted files.
- The MP3 decoder does not support MPEG1 Layer 1 or Layer 2 playback.
- The access and response time of the content on a device can differ depending on the type or brand of the device.
- The access and response time of the content on a device will decrease the more unsupported or corrupted files are on the device.

Portable Memory Issues

- The following memory cards* are supported by the digital media reader:
  - CompactFlash Card (Type I & II) (CF)
  - IBM Microdrive
  - Memory Stick + Memory Stick Pro
  - SecureDigital Card (SD)
  - SmartMedia Card (SM)
  - MultiMedia Card (MMC)
- XD cards are supported through an external XD compatible card reader (not supplied with the TV) connected to the USB connector. The same holds for other future memory cards.
- Do not apply excessive force when inserting a memory card into the digital media reader. If the memory card doesn't fit or isn't detected by the TV, try to flip over the card and re-insert it.
- When inserting multiple cards at the same time some card combinations will work. It is however recommended to insert maximum one memory card at the same time.

* *Trademarks and trade names belong to their respective owners.*

Digital Camera Issues

If a USB connection between your digital camera and the TV isn't working, you can try the solutions below to resolve your problem.

- Make sure your digital camera is switched on and verify if the configuration of your digital camera is correct (see the manual of your digital camera for more information).
- Some digital cameras allow you to switch off the USB interface. Make sure that the USB interface is switched on before connecting to the TV.
- Remove the memory card from your digital camera and insert it directly into the digital media reader on the right side of your TV.
- If you have a digital camera with only internal memory (no removable memory) you can try to copy the content manually to a memory card or a USB memory device using a personal computer.
- Some digital cameras allow you to switch between PTP (Picture Transfer Protocol) or "PC Link" and USB Mass Storage or "PC Drive". Make sure that you select USB Mass Storage or "PC Drive" on your digital camera.
- If your camera supports different interface settings be sure to try them one by one or contact the reseller of your camera to find out the correct setting.

USB Memory Device Issues

- Devices connected to the USB port of your TV must be "Mass Storage Class" compliant. If your device (digital camera. MP3 player, portable harddisk, …) is not "Mass Storage Class" compliant it will not be detected by the content browser of the TV.
- The following subsets of the Mass Storage Class specification are supported:
  - The implementation of the TV is based on the "Universal Serial Bus Mass Storage Class Specification Overview" (v1.2, June 23, 2003) including all documents referenced by the document. The document can be found on the USB standardisation website (www.usb.org).
  - Full support of the USB Mass Storage Class Bulk-Only Transport (bInterfaceProtocol = 50h).
  - Full support of SubClass Code = 05h; SFF-8070i spec.
  - Full support of SubClass Code = 06h; SCSI transparent command set.
- For large USB memory devices, when you are in the Content Browser, it may take a long time before you can access your files.
- When using a USB portable harddisk: Due to the high power consumption of the harddisk, it is advised to use the external power supply of the portable harddisk to guarantee proper working under all conditions.

connectedplanet

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What is Connected Planet ?

Connected Planet provides easy access to digital pictures, video and music files on your PC. Please read the following instructions carefully and follow very closely and step by step the instructions.

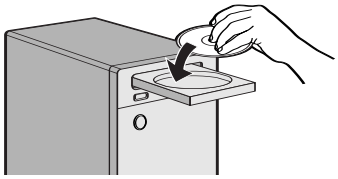
What do you need to enjoy Connected Planet ?

1. A network connection to your PC.
   Note: Initially we will explain how to connect your TV to a wired network. Creating a wireless network connection is explained in Annex 1, p. 8.

2. Install the Philips Media Manager (PMM) from the supplied connectedplanet CD on your PC.

If you have problems or questions or if you feel you don't have sufficient knowledge about PC connectivity and PC networking, please contact your PC or TV retailer to assist you.

Step 1: Installing the Philips Media Manager (PMM)



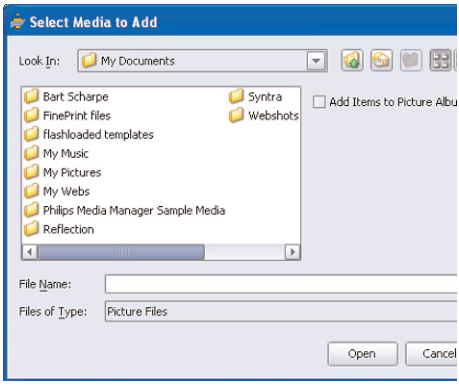
1. Insert the supplied connectedplanet CD into your computer's CD drive.
   *If the CD does not start automatically, double-click **My Computer**, then the CD-ROM drive icon and finally **start.htm** to start the CD.*

2. Please select your language, click on **Install Media Manager** and follow the on-screen instructions.
   Notes:
   - *If the screen Product Configuration appears, DO NOT tick WMA (Windows Media Audio) or WMV (Windows Media Video), as our TV does not support those contents.*
   - *You can install the PMM on more than one computer in your home network.*
   - *Make sure that the PMM is not blocked by the firewall installed on your PC.*

3. **Select your PMM menu language.**
   You can select among a few available languages in the Settings menu.

4. **Change the PMM server name**
   You can change the name of the PMM Server in the PMM Settings menu. This server name is important as it will be displayed on your TV when the PMM is detected. Possible names are "PC Study", "PC John", "PC bedroom".

5. Restart your PC after installing the PMM.



Adding files in the Philips Media Manager (PMM)

1. Select the PMM from your Windows Start-menu or double-click on the PMM symbol in the task bar.
2. Click on **Music**, **Pictures** or **Movies** at the top of the PMM window.
3. Select **Add Music**, **Add Pictures** or **Add Movies**.
4. Click on **Add Files or Folders... .**
5. Select a folder or one or more media files and click on **Open** to add the selected folder or files to the Media Manager window.

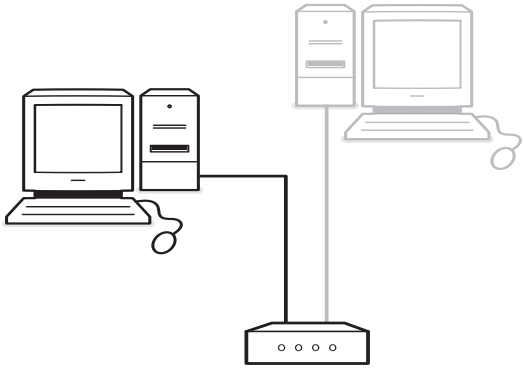
Step 2: Identifying your PC configuration

We will focus on the two main PC configurations found in modern households today.
Check the glossary for explanations of technical terms used.

OR

Configuration A

Before connecting your TV



You have
- a router
- one or more PCs connected to the router
- one free Ethernet connector on the router

Go to Connecting and configuring your TV, Configuration A, p. 5.

Configuration B

If feasible we advise to set up a router-based network as described in Configuration A before connecting your TV.

Before connecting your TV

You have
- a PC with a free Ethernet connector.
  Note: If you don't have a free Ethernet connector on your PC you will have to buy and install an extra Ethernet card.

Go to Connecting and configuring your TV, Configuration B, p. 5.

Connecting your TV to a single PC requires a special crossed network cable.

Step 3: Connecting and configuring your TV

Configuration A

Make sure DHCP/Auto IP (automatic network addressing) is enabled on your router and your PCs.

On most of the recently purchased PCs and routers, automatic network addressing is already enabled.

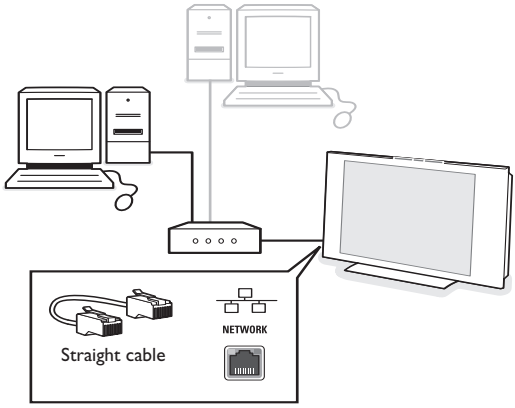
You can check this on your PC with the Network Utility on the supplied connectedplanet CD.

If DHCP/Auto IP is not enabled, see Annex 4, p. 14 to enable DHCP/Auto IP on your PC.

For enabling DHCP on your router, see the user manual of your router.

Connecting your TV

1. Push one end of an Ethernet cable (**a straight cable**) into the **NETWORK** connector at the bottom of the TV.



2. Push the other end into a free Ethernet connector on your router.
3. Go to 'Viewing multimedia content' on p. 6 to test your connection.

Configuration B

Make sure DHCP/Auto IP (automatic network addressing) is enabled on your PC.

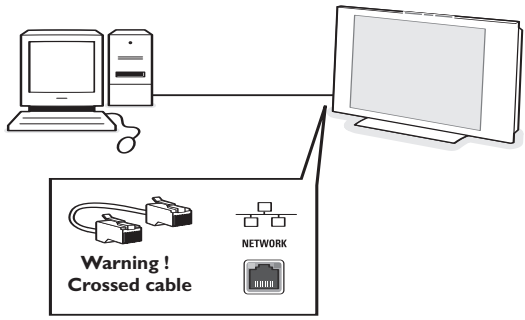
On most of the recently purchased PCs, automatic network addressing is already enabled.

You can check this on your PC with the Network Utility on the supplied connectedplanet CD.

If DHCP/Auto IP is not enabled, see Annex 4, p. 14 to enable DHCP/Auto IP on your PC.

Connecting your TV

1. Push one end of a crossed Ethernet cable (**a crossed cable**) into the **NETWORK** connector at the bottom of the TV.

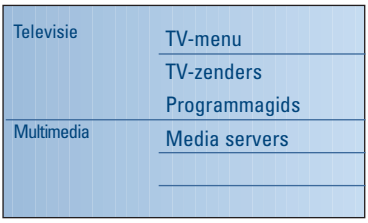


2. Push the other end into the free network connector on your PC.
3. Go to 'Viewing multimedia content' on p. 6 to test your connection.

Step 4: Viewing multimedia content

Make sure the PC with Philips Media Manager installed on it (see p. 2) is switched on.

1. Switch on your TV.
2. Press the **BROWSE/MENU** key on the remote control to display the Browse menu.
3. Select your PC from which you want to access the content and press the cursor right.



Note: It may take up to 2 minutes after switching on the TV before your PC appears in the Browse menu.

4. Use the cursor keys to navigate through the **Pictures**, **Music**, **Video** files or folders.

   folder

   picture file

   music file

   video file

5. Press the **OK** key to play the content.
6. Press the cursor left to display the content list again.

- Use the colour keys on the remote control to perform the corresponding function mentioned at the bottom of the screen.
- Press any colour key or the i+ key to make the function bar at the bottom of the screen visible again.

Function keys at the bottom of the screen

Details	to display a description of the selected file or directory;
Transitions	to select if a transition during a slide show should be applied;
Slide time	to select the duration a picture will be displayed in a slide show;
Rotate	to rotate a picture
Repeat one/all	to repeat the playback of a music file;
Shuffle	to shuffle music collections in a random way
Zoom	to select one of the zoom magnifications (x1, x2, x4) with the cursor keys up/down; Additionally you can shift the selected zoom window over the screen with the cursor keys left/right;
Full/small screen	to toggle between a full or a small screen.

Multimedia browser functional keys:

■	to stop playing your content
▶▶	for fast forward
◀◀	for rewind
▶	for play, for pause
-P+	to go to the next or previous media file
cursor up/down	to make subtitles visible

See Troubleshooting (p. 20) in case of problems playing files or in case your PC does not appear in the Browse menu.

See Annex 5 (p. 17) for information about the supported file formats. If you create content, make sure it complies to these specifications.

Note:
If a media file (music, picture or video) does not play or plays in poor quality:
- *The file format may not be supported by the system. Play a media file with a supported file format.*
- *The quality of your media is low.Test the media on your PC to verify the quality.*

Annex 1 : Creating a wireless network connection

If you have problems or questions or if you feel you don't have sufficient knowledge about PC connectivity and PC networking, please contact your PC or TV retailer to assist you.

Always try to reduce the number of wireless connections. You will in most cases not be able to stream video if both PC and TV are connected wireless to the network.

Consult the list of recommended wireless Ethernet bridges on the Philips support website: www.philips.com/support

Connection	Playback quality	
Wired	Video	++++
	Music	++++
	Pictures	++++
8201.11a wireless	Video	++
	Music	+++
	Pictures	+++
802.11g wireless	Video	+
	Music	+++
	Pictures	+++
802.11b wireless	Video	-
	Music	+++
	Pictures	+++

To avoid implementation problems we recommend using a Wireless Access Point device (e.g. Philips CPWBS054) in combination with a wireless Ethernet bridge (also called a "Game adapter").

Wireless devices use a wireless protocol to communicate by means of radio waves. Wireless radio waves travel outwards from the antenna in all directions, and can transmit through walls and floors.
Wireless radio waves can theoretically reach up to 100 meters in an open environment. Practically it could be less than 10 meters depending on the type of walls and floors in your home and other environmental conditions. The content playback quality will depend on the wireless signal quality and the connection type.

Notes:

- *It is recommended to buy a Wireless Access Point supporting 802.11 a/b/g or b/g. The a-type devices are ideal for transferring good video quality and the g-type devices are sufficient for good audio quality. The b-type devices are not suitable for good video streaming.*
- *Do not use an ad-hoc wireless connection (TV-PC) as it limits your bandwidth.*

Configuring a wireless Ethernet bridge

Network name (SSID):
WEP key 1:
WEP key 2:
WEP key 3:
WEP key 4:
WPA key:

Make sure DHCP/Auto IP (automatic network addressing) is enabled on ALL your network devices (Wireless Access Point, PCs).

Note: Nowadays the functionality of a Wireless Access Point and a router are mostly combined into one box. If this is not the case, the installation may slightly differ from the instructions below.

1. Enable DHCP/Auto IP on ALL your PCs.
   You can check this on your PC with the network identification tool. See Tools, Network Utility on the supplied CD.
   If DHCP/Auto IP is not enabled, see Annex 4, p. 14 to enable DHCP/Auto IP on your PC.
2. Enable DHCP/Auto IP on your Wireless Access Point, see the user manual of your router.

Preparing your network

1. First check and write down the settings of your Wireless Access Point. You need the SSID, WEP key(s) or WPA key(s).
   Note: It is possible that your WEP or WPA keys are hidden.
2. To simplify the configuration procedure temporarily remove the security of your wireless network (if enabled). Consult the user manual of your Wireless Access Point to make the following settings:
   • Switch on the SSID broadcast.
   • Switch off wireless security (WEP/WPA keys).
   • Switch off MAC filtering.

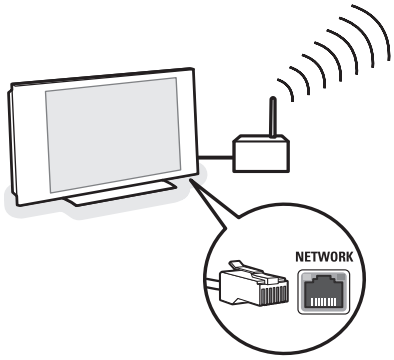
Note: Also switch off the wireless security (WEP/WPA keys) of your wireless PC driver.

More details on configuring the recommended wireless Ethernet bridges can be found on the Philips support website: www.philips.com/support

Configuring the wireless Ethernet bridge

1. Disconnect your PC from your network.
   - In case of a wireless USB dongle, remove the dongle from your PC.
   - In case of an integrated wireless network adapter (e.g. laptop PC), disable the network adapter.
   - In case your PC has a wired connection, unplug the Ethernet cable from your PC.
2. Connect the wireless Ethernet bridge to your PC.
3. Consult the user manual supplied with the wireless Ethernet bridge to configure your device.
   The following settings need to be applied:
   - Password (see access point documentation)
     Note: Do not change any passwords at this time.
   - Infrastructure (access point) mode
   - SSID-name of your wireless network
   - DHCP/Auto IP enabled
   - Security encryption disabled

   If your PC can connect to the Internet using a web browser, the wireless Ethernet bridge is configured correctly.
   Notes:
   - *After configuring your wireless Ethernet bridge you may need to wait a while before the connection is active. You may even have to restart the bridge.*
   - *How to restart the bridge, consult the user manual of the bridge. The user manual will also explain the meaning of the different indicators (LEDs) on your bridge and how they should behave after powering the bridge.*
   - *If you don't succeed to browse the Internet using your wireless Ehternet bridge, please contact the retailer of the bridge (instead of Philips).*
4. Disconnect your wireless Ethernet bridge from the PC and connect it to the **NETWORK** connection at the bottom of your TV.
5. Reconnect your PC to your network.



Testing the wireless Ethernet bridge

1. Make sure the wireless Ethernet bridge is connected to the **NETWORK** connection at the bottom of your TV.
2. Switch on your TV.
3. See "Testing your connection" on p. 9.

Re-securing your wireless network

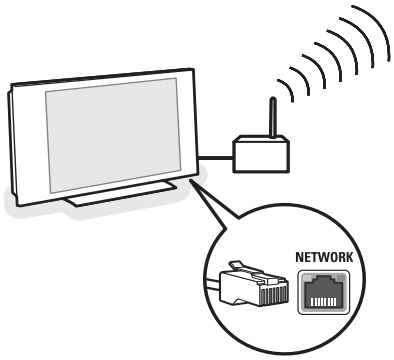
Also see Annex 2:Wireless network security, p. 12.

1. Consult the user manual of your Wireless Access Point to apply its security setting according to the details you wrote down earlier.
   - Switch off the SSID broadcast.
   - Switch on wireless security (WEP/WPA keys).

   Note: If you don't have your WEP/WPA keys you will need to create new ones and apply them to all wireless devices connected to your wireless network.
2. Disconnect your PC from your network.
   - In case of a wireless USB dongle, remove the dongle from your PC.
   - In case of an integrated wireless network adapter (e.g. laptop PC), disable the network adapter.
   - In case your PC has a wired connection, unplug the Ethernet cable from your PC.
3. Connect the wireless Ethernet bridge to your PC.
4. Consult the user manual supplied with the wireless Ethernet bridge to configure your device according to your current wireless network settings.
   If your PC can connect to the Internet using a web browser, the wireless Ethernet bridge is configured correctly.

   Note: After configuring your wireless Ethernet bridge you may need to wait a while before the connection is active.You may even have to restart the bridge.
5. Disconnect your wireless Ethernet bridge from the PC and connect it to the **NETWORK** connection at the bottom of your TV.
6. Reconnect your PC to your network.

   Note: Also switch on the wireless security (WEP/WPA keys) of your wireless PC driver.



Annex 2 : Wireless network security

Attention

Since wireless computer networks use radio signals, it is possible for other wireless network devices outside your immediate area to pick up the wireless signals and either connect to your network or to capture the network traffic.
Consult the user manual supplied with your wireless Access point or wireless Ethernet bridge for further information.

DO

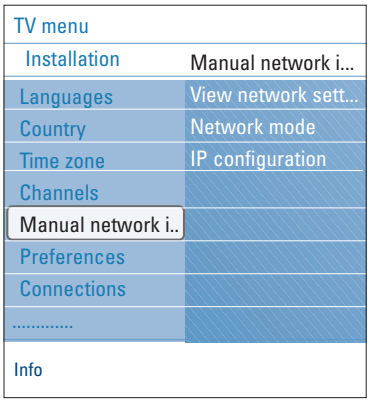
- Viruses, spyware and other malicious programs can undermine the security of your network. Use the appropriate software to protect your PC from these threats.
- Change the default passwords for your network devices. Leaving these at default makes it easy for an outsider to gain access.
  Note: If you change passwords, write them down and store them in a safe location.
- Use a router or a Wireless Access Point with Network Address Translation (NAT) or a firewall.
- In a wireless network, enable the highest WEP key level that your hardware provides for. Upgrade your hardware, if possible. If you do not protect your wireless network, all data from your PC might be accessible to, for example, your neighbours or passers-by.
- Switch off SSID broadcast on the Wireless Access Point.
- Position your Wireless Access Point away from windows and towards the centre of your home. This decreases the strenght of the signal outside your home.
- Some access points can control access based on the unique MAC address of the network devices trying to connect to it. See the documentation of your network devices to retrieve the MAC addresses.
  For the MAC address of your TV, see Annex 3, Manual Network Installation,View Network settings, p.13.

DON'T

- Don't rely on radio transmission range limitations to secure your network.
- Don't use WEP/WPA keys and passwords that are easy to guess.
- Don't use passphrases to secure your wireless network as incompatibility with other brands of wireless network devices may occur.

Annex 3 : Configuring your network settings manually

Attention: If you have problems or questions or if you feel you don't have sufficient knowledge about PC connectivity and PC networking, please contact your PC or TV retailer to assist you.



This menu allows you to do the network installation yourself and to determine your own network configuration.

1. Select **Manual network installation** in the Installation menu.
2. Press the cursor right to enter the Manual network installation menu.
   According to your personal network setup, the available menu items are present and can be selected.
3. Read and follow the menu-info at the bottom of the screen to execute the requested actions.

View network settings

This will display the current values of the network parameters associated with the network.

Network mode

This allows you to select your network configuration mode.
Choose **DHCP & Auto IP** for automatic network configuration by your router or wireless access point (preferred).
Choose **Static IP** for manually entering a static network configuration. Proceed with IP configuration.

IP configuration

This allows you to enter your IP configuration settings if you selected Static IP in the Network mode menu:

- **IP address**: you are prompted to enter a fixed IP address that the TV will use in your network. Preferably choose one from the range:
  192.168.0.xxx or
  192.168.123.xxx or
  10.0.0.xxx
- **Subnet mask**: you are prompted to enter the subnet mask address of your network.
  Enter the same subnet mask throughout your network, e.g. 225.225.255.0

__DHCP/Auto IP__ or automatic network addressing is a protocol used to automatically connect network devices to a network. Please, refer to your router or wireless access point's hardware instructions to see if this is supported.

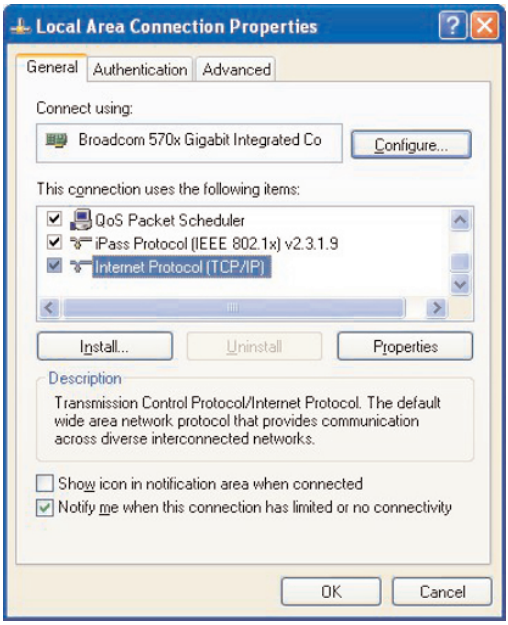
__Static (or fixed) IP address__: This is an IP address that your TV will always use to connect to your home network. When DHCP/Auto IP is not available, you can set a static IP address on your TV.

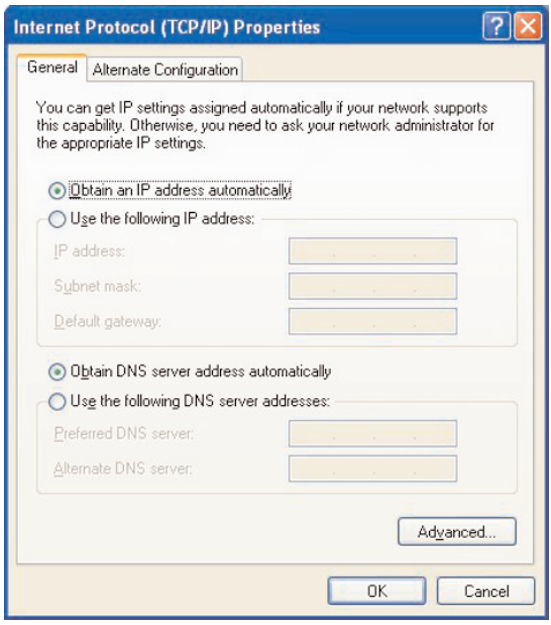
A __Subnet mask__ is used to define a subnet which is separated from all other networks by a router. The subnet mask indicates which part of the IP address is on the local network, and which must go out through the router.

Annex 4 : Enabling DHCP/Auto IP on your computer

Windows XP

1. On the Windows desktop, click **Start** and select **Control Panel**.
2. In the Control Panel window, click **Network and Internet Connections**.
3. The Network Connections window will open. Double-click on the LAN-connection for this PC.
4. On the connection status screen, click **Properties**.
5. Double-click **Internet Protocol** (TCP/IP).
6. If **Obtain an IP address automatically** and **Obtain DNS server address automatically** are selected, your computer is already configured for DHCP/Auto IP. If not, select these options.




Internet Protocol (TCP/IP) Properties
General
Alternate Configuration
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address:
Subnet mask:
Default gateway:
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server:
Alternate DNS server:
Advanced...
OK
Cancel

Windows 2000

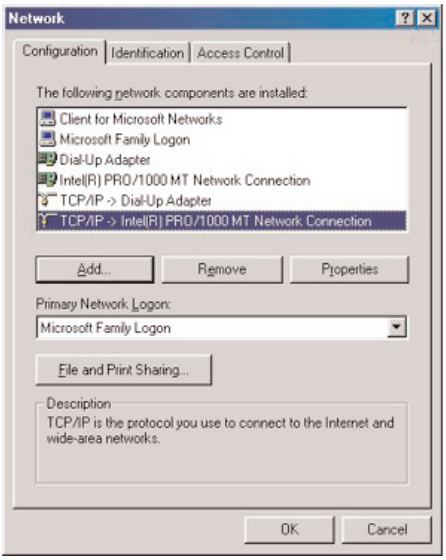
1. On the Windows desktop, click **Start > Settings > Network and Dial-Up Connections**.
2. Click the icon that corresponds to the LAN-connection for this PC.
3. The connection status screen will open. Click **Properties**.
4. Double-click **Internet Protocol (TCP/IP)**.
5. If **Obtain an IP address automatically** and **Obtain DNS server address automatically** are already selected, your computer is already configured for DHCP/Auto IP. If not, select these options.

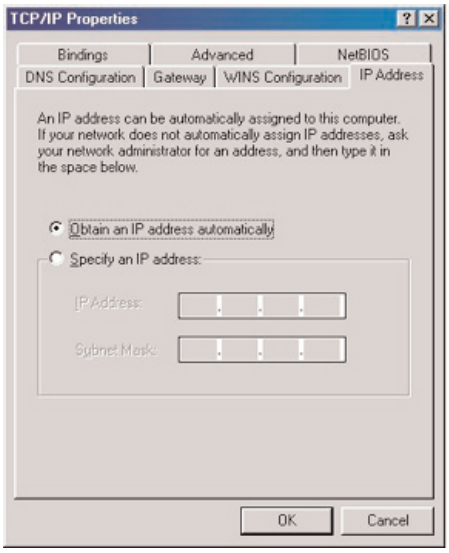
   For the screen dumps, see those as for Windows XP above.

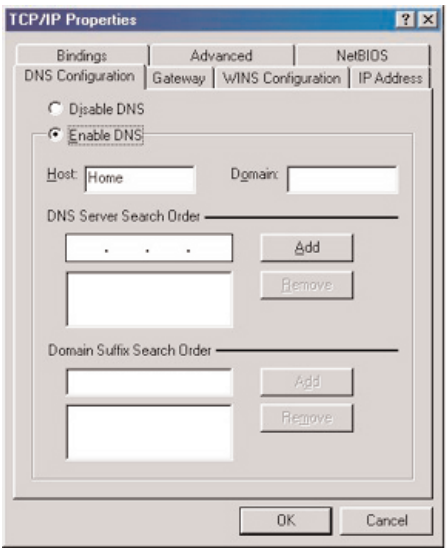
Windows 98/Me

You may find that the instructions in this section do not exactly match your version of Windows. This is because these steps and screen shots were created from Windows 98. Windows Millennium Edition is similar, but not identical, to Windows 98.

1. On the Windows desktop, click **Start > Settings > Control Panel**.
2. In the Control Panel, double-click the Network icon.
3. In the Network window, under the **Configuration** tab, double-click the **TCP/IP** item listed for your network card.
4. In the TCP/IP window, select the **IP Address** tab. If **Obtain an IP address automatically** is already selected, your computer is already configured for DHCP/Auto IP. If not, select this option.
5. If you changed the settings in the IP address tab, also select the DNS Configuration tab and select the option **Enable DNS**.
   You will be requested for the **Host** name.
   Enter **Home** or any other preferred name.
6. Windows may need your Windows 98/Me CD to copy some files.
   After it finishes copying, it will prompt you to restart your system.
   Click **Yes** and your computer will restart.




TCP/IP Properties
Bindings
Advanced
NetBIOS
DNS Configuration
Gateway
WINS Configuration
IP Address
An IP address can be automatically assigned to this computer. If your network does not automatically assign IP addresses, ask your network administrator for an address, and then type it in the space below.
Obtain an IP address automatically
Specify an IP address:
IP Address:
Subnet Mask:
OK
Cancel

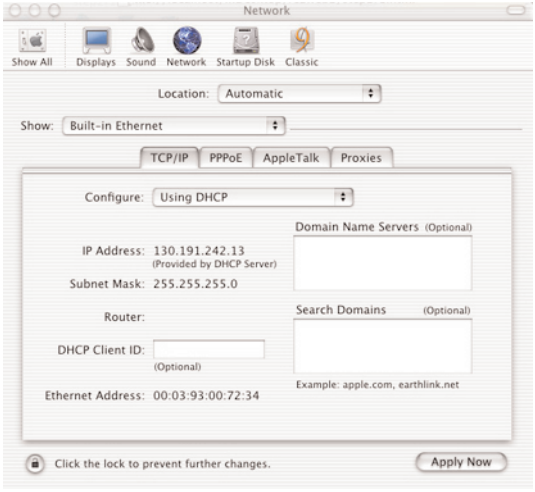


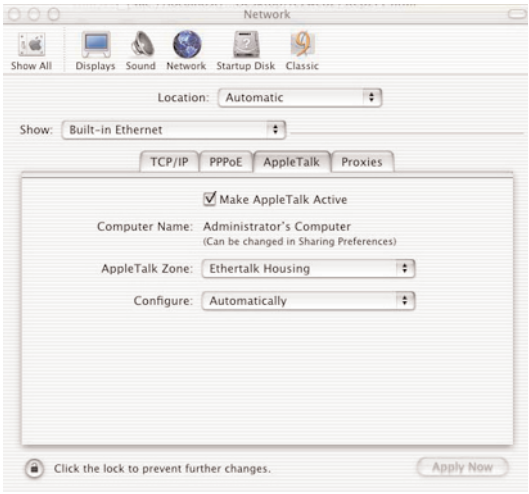
Apple Macintosh Computers

Mac OS 10.x

You may find that the instructions here do not exactly match your operating system.This is because these steps were created using Mac OS 10.3. Earlier or later versions of Mac OS 10 will be similar, but may not be identical.

1. Pull down the Apple Menu.
2. Select **System Preferences..** .
3. Click on the Network icon under **Internet & Network**.
4. Click on **Configure..** .
5. If **Using DHCP/Auto IP** is already selected in the Configure field, your computer is already configured for DHCP/Auto IP. If not, select this option and close the Network window.

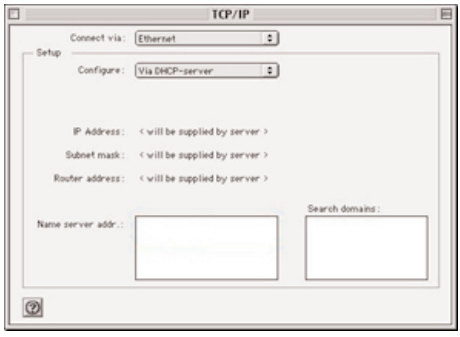




Mac OS 9.x

You may find that the instructions here do not exactly match your operating system.This is because these steps were created using Mac OS 9.2. Earlier versions of Mac OS will be similar, but may not be identical.

1. Pull down the Apple Menu.
2. Under **Control Panels** select **TCP/IP**.
3. If **Via DHCP-server** is already selected in the **Configure** field, your computer is already configured for DHCP. If not, select this option and close the TCP/IP control panel.



Annex 5 : Supported file formats

A codec (encoder/decoder) is a technology for compressing and decompressing data. Codecs convert digital signals to and from analog, and can be implemented in software, hardware, or a combination of both. Standard codecs are used to encode and compress audio and video data for streaming across networks.

Overview

- Supported Video multimedia files: MPEG1, MPEG2, MPEG4, DivX & XviD
- Supported Audio multimedia files: MP3, MP3Pro & LPCM
- Supported Picture multimedia files: JPEG

Supported Extensions

Content type	Supported File ExtensionsContent
Pictures	
JPEG	.jpg .jpeg
Audio	
MP3 & MP3Pro	.mp3
LPCM	.wav (PC); .aif .aiff (MAC)
Video	
MPEG1	.mpg .mpeg
MPEG2	.mpg .mpeg .vob
MPEG4	.mp4
DivX	.avi .divx
XviD	.avi .xvid
Playlist & Slideshows	
Audio	.pls .m3u
Pictures	.alb (only from Memory Card or USB)

Supported Audio Streams

Content Group	Content Type	Supported Audio Streams
Audio Files	MP3	MPEG1/2 & 2.5 Layer III
	MP3 Pro	MP3 Pro
	LPCM	LPCM audio/L16
Video Files	MPEG1	MPEG1 Layer I, Layer II
	MPEG2	MPEG1 Layer I, Layer II and AC-3
	MPEG4	AAC4 and CELP4
	DivX	MPEG1 Layer III and AC-3
	XviD	MPEG1 Layer III and AC-3

Detailed Picture codec specifications

Content Type	Sample Rate	Restrictions
JPEG	All resolutions and aspect ratios with a maximum of 16 Mpixels JFIF, EXIF & SPIFF encapsul.	Only linear JPEG encoding is supported. All progressive formats are not supported. Only 3 colour spaces pictures are supported (e.g. RGB or YUV). CMYK encoded pictures are not supported. Pictures with a resolution smaller than 16x16 pixels are not supported.

Detailed Audio codec specifications

Content Type	Sample Rate	Restrictions
MP3	MPEG1 Layer I: 32, 44.1 & 48 kHz	32, 64, 96, 128, 160, 192, 224, 256, 288, 320, 352, 384, 416 & 448 kbps
	MPEG1 Layer II: 32, 44.1 & 48 kHz	32, 48, 56, 64, 80, 96, 112, 128, 160, 192, 224, 256, 320 & 384 kbps
	MPEG1 Layer III: 32, 44.1 & 48 kHz	32, 40, 48, 56, 64, 80, 96, 112, 128, 160, 192, 224, 256, 320 kbps
	MPEG2 Layer I: 16, 22.05 & 24 kHz	32, 48, 56, 64, 80, 96, 112, 128, 160, 192, 224, 256 kbps
	MPEG2 Layer II: 16, 22.05 & 24 kHz	8, 16, 24, 32, 40, 48, 56, 64, 80, 96, 112, 128, 144, 160 kbps
	MPEG2 Layer III: 16, 22.05 & 24 kHz	8, 16, 24, 32, 40, 48, 56, 64, 80, 96, 112, 128, 144, 160 kbps
	MPEG2.5 Layer III: 8, 11.025 & 12 kHz	8, 16, 24, 32, 40, 48, 56, 64, 80, 96, 112, 128, 144, 160 kbps
MP3Pro	8, 11.025, 12, 16, 22.05, 24, 32, 44.1 & 48 kHz	For Stereo streams: 32, 40, 48, 56, 64, 80, 96, 112, 128, 160, 192, 224, 256 and 320 kbps For Mono Streams: 8, 16, 18, 20, 24, 32, 40, 48 kbps
LPCM	16, 22.05, 24, 32, 44.1 & 48 kHz	Bit resolution: 16-bit and 32-bit Channels: Mono & Stereo.
AC3	32, 44.1 & 48 kHz	From 32 kbps up to 640 kbps
AAC4	16, 22.05, 24, 32, 44.1 & 48 kHz	For mono from 16 kbps up to 288 kbps For stereo from 32 kbps up to 288 kbps
CELP4	7.350, 8 &16 kHz	From 3.85 kbps up to 24 kbps

Detailed Video codec specifications

Content Type	Resolution	Restrictions
MPEG1	All aspect ratios up to CIF resolution: Typical values are: QCIF - 176x144 (PAL) - 176x120 (NTSC) CIF - 352x288 (PAL) - 352x240 (NTSC)	Maximum 1.5 Mbps
MPEG2	ML@MP video up to D1 resolution. Typical values are: 704 or 720x576 at 25 fps (PAL) 50 Hz. 704 or 720x480 at 29.97 fps (NTSC) 59,94 Hz.	Max 8Mbps over through a network connection with a maximum jitter of 1 sec and 4 Mbps over an internal connection with a maximum jitter of 4 seconds.
MPEG4	All aspect ratios up to D1 resolution. Typical values are: QCIF - 176x144 (PAL) - 176x120 (NTSC) CIF - 352x288 (PAL) - 352x240 (NTSC) HD1 - 352x576 (PAL) - 352x480 (NTSC) D1 - 720x576 (PAL) - 720x480 (NTSC)	Max 4Mbps over through a network connection with a maximum jitter of 1 sec and 4 Mbps over an internal connection with a maximum jitter of 4 seconds Maximum movie length 20 minutes.
DivX	Support for DivX v4 & v5 All aspect ratios up to D1 resolution. Typical values are: QCIF - 176x144 (PAL) - 176x120 (NTSC) CIF - 352x288 (PAL) - 352x240 (NTSC) HD1 - 352x576 (PAL) - 352x480 (NTSC) D1 - 720x576 (PAL) - 720x480 (NTSC)	Max 4Mbps over through a network connection with a maximum jitter of 1 sec. Trick modes (FF, REW, …) are not supported if the size of the multimedia file exceeds 2Gbyte. No support for DivX v3.11.
XviD	All aspect ratios up to D1 resolution. Typical values are: QCIF - 176x144 (PAL) - 176x120 (NTSC) CIF - 352x288 (PAL) - 352x240 (NTSC) HD1 - 352x576 (PAL) - 352x480 (NTSC) D1 - 720x576 (PAL) - 720x480 (NTSC)	Max 4Mbps over through a network connection with a maximum jitter of 1 sec .

General restrictions

- The maximum size of any multimedia file should never exceed 4Gbyte.
- Do not use a dot "." in folder naming.
- The minimum bitrate for ALL video streams formats is 256kbps. Any stream with a bitrate lower than 256kbps can result in visual artifacts and stopping video.
- The maximum bitrate for streaming content (audio & video) can be restricted by the bandwidth of your local wired or wireless network. The bandwidth (performance) of your PC or USB device can also limit the maximum bandwidth available for streaming. The numbers in the tables above are only an indication of the maxima as defined by the TV system connected through a wired Ethernet connection.
- If video streams are supporting multiple audio tracks the first audio track will automatically be selected, the other audio tracks can't be selected.
- External subtitle files (e.g. DivX.srt subtitle files), internal(VOB) are not supported.

Network related restrictions

- The length of a filename, including the directory path, should not exceed 500 characters for network (PC) based content.
- The maximum bitrate for streaming content (audio and video) can be restricted by the bandwidth of your local wired or wireless network. The bandwidth (performance) of your PC or USB device can also limit the maximum bandwidth available for streaming. The numbers in the tables above are only an indication of the maxima as defined by the TV system connected through a wired Ethernet connection.

Memory Card and USB related restrictions

- Only FAT (DOS) formatted (initialized) portable memory is supported. Errors in this formatting can result in unreadable content. If such problems appear try to re-format the card. Be aware that formatting the card will also delete all the content on it (pictures, music, …).
- The following file types are supported: .jpg, .jpeg, .mp3, .alb, .m3u and .pls.
- Only linear JPEG picture formats are supported. Progressive JPEG encodings are not supported.
- The length of a filename or directory name is limited to the length specified by the FAT12/16/32 file systems.
- Max. levels of nested directories is 19.
- Never use the supported file type extensions (.jpg, .jpeg, .mp3, .alb, .m3u and .pls) as extensions for directories as these directories will be treated as corrupted files.
- The MP3 decoder does not support MPEG1 Layer 1 or Layer 2 playback.
- The access and response time of the content on a device can differ depending on the type or brand of the device.
- The access and response time of the content on a device will decrease the more unsupported or corrupted files are on the device.
- The length of the filename including the directory path and USB device name should not exceed 250 characters for USB or Memory Card based content.

Remark

Future upgrades of these codec specifications become available through software upgrades on the www.philips.com/support website. How to upload a new software versions, see Annex 1, p. 8 of the extended manual on the supplied CD.

Troubleshooting

Problem	Possible cause	Solution
The Installation CD will not start.	• Autorun is disabled on your PC.	Double-click 'My Computer', then the CDROM drive icon and finally 'Philips.pdf' to start the CD.
The software will not install.	• Wrong operating system.	Go to www.philips.com/support to see which operating systems are supported.
My PC is not detected in the **Browse** menu. (**Media servers** is displayed)	• PC is switched off. • The Philips Media Manager software is not running. • No wireless network adapter connected. • Network host (PC) or wireless station base is switched off. • Your wireless access point/ router employs MAC filtering and prevents the TV from connecting to your network. • Your TV is not connected properly to the network.	• Switch on your PC. • Start the Philips Media Manager software. • Connect the wireless network adapter to your PC. • Make sure your home network is operational before you try to connect a networked computer with your TV. • Add your TV's MAC address to the list of devices that may connect to your wireless access point/ router. See the user manual that came with your wireless access point/router for instruction on how to do this. • Select Media servers and press the **OK** key. Follow the instructions on screen.
I can't see the files on my PC.	• No files were added in the Philips Media Manager. • Media format not supported	• Check that files have been added using the Philips Media Manager. • Go to www.philips.com/support to check for the latest information on supported formats.
No wireless connection or intermittent drop-out of the wireless connection.	• Wireless signal range, speed, and strength can be affected by interference from neighbouring wireless networks and devices. Electro-magnetic devices such as televisions, radios, micro-wave ovens, and cordless telephones, especially those with frequencies in the 2.4 GHz range, may also interfere with wireless transmission.	Switch off wireless devices that interfere with your wireless network connection. Place the wireless access point as high and centrally as possible to improve signal strength. Always try to reduce the number of wireless connections. You wiill in most cases not be able to stream video if both PC and TV are connected wireless to the network. Keep access point and Ehternet bridge away from large metal objects.
New features as advertised on the Internet are not available.	• You are using an older software version that does not have those features.	Upgrade the TV software. See your TV user manual. Also check for the latest version of the Philips Media Manager software (see www.philips.com/support).

Glossary

Access point: This is a wireless device that is often added to a wired network to enable wireless operation. It can also be used in an ad-hoc network configuration.

Ad-Hoc network: A direct network connection between two devices (two PCs, or a PC and a TV).

DHCP: Refers to Dynamic Host Configuration Protocol used by many routers to automatically connect computers to the network. Please, refer to your router or gateway hardware instructions to see if this is supported.
The router acts as a DHCP server. This server allocates IP addresses, netmasks, and the gateway address to all DHCP client computers and devices in the network automatically.

DNS: The Domain Name System is a distributed Internet directory service. DNS is used mostly to translate between domain names and IP addresses, and to control e-mail delivery.

DivX 4, DivX 5, XviD: a digital video compression format based on the MPEG-4 technology, used mainly for downloadable movies on the Internet.

Ethernet: Ethernet is a well-established local area networking standard, and is incorporated into (or available for) most computers.

Firewall: A firewall acts as a barrier that helps protect your network from intruders from the Internet. The firewall specifies what information can be communicated from the computers on your network to the Internet, and from the Internet to the computers on your network.

Gateway: The address of the upper device that has a connection to the Internet.
A Gateway router is a network component that attaches to your cable or ADSL modem. It allows multiple computers or other devices to be connected together and to share the same broadband Internet connection.
(A wireless router is required for wireless connection.)

Home network: A network is a wired or wireless connection between two or more devices. Home networks allow you to connect computers together to share files and an Internet connection.

IP address: Internet Protocol. The language by which systems inter-communicate over the Internet, each system having a unique "IP Address" by which it may be identified.

IP addresses uniquely
identify every network or host on the Internet. Every computer in a network has a unique IP address.

MAC address: (Media Access Control address) Each device (e.g. PC Ethernet card, router, wireless Ethernet adapter, ...) that can be connected to a network has a unique hardware address.

MP3: A popular standard audio compression format used on the Internet. Most commonly used to play audio on computer.

MP3 Pro: A newer MP3 format. Offers an improvement in compressed sound quality.

MPEG 4: standard for audio/video compression, with higher compression rate than MPEG 2.

Netmask: A netmask is used to define a sub-net which is separated from all other networks by a router. The netmask indicates which part of the IP address is on the local network, and which must go out through the router.

PC Link: PC Link is a feature that enables you to transfer music, picture or movie files from the computer(s) on your home network to your TV. You need to install the Philips Media Manager software to use PC Link.

Philips Media Manager: The software you need to install and have active on your PC to be able to access music, pictures and video on your PC.

PMM: Philips Media Manager.

Router: A device that does the interconnecting of networks. Its job is to coordinate and filter traffic between the networks. (E.g. your home network and the Internet)

SSID: The name of your wireless network.
Stream: A transmission of music or video that is played instantly and not stored locally.

WEP: Designates a type of wireless encrytion.

WiFi: The international leading industry standard for wireless broadband networking. Also called IEEE 802.11.

Wireless access point: This is a wireless device that is often added to a wired network to enable wireless operation. It can also be used in a ad-hoc network configuration.